

**Appendix A**  
**Joint Public Notice**



**US Army Corps  
of Engineers.**

# Public Notice

Public Notice No. 07-95

Date: December 13, 2007

Nashville District

Application No. 200701161

Expires: January 12, 2008

Please address all comments to: Regulatory Branch, 3701 Bell Road, Nashville, TN 37214-2660; ATTN: J. Ruben Hernandez

JOINT PUBLIC NOTICE  
US ARMY CORPS OF ENGINEERS  
AND  
TENNESSEE VALLEY AUTHORITY

SUBJECT: Proposed Community Dock, Boat Ramp, Dredging, and Riprap at Mile 583.3, Left Bank, Tennessee River, in Loudon County, Tennessee

TO ALL CONCERNED: The application described below has been submitted for a Department of the Army Permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) and Tennessee Valley Authority permit pursuant to Section 26a of the TVA Act (16 USC 831y-1)**. Before a permit can be issued, certification must be provided by the State of Tennessee, Division of Water Pollution Control, pursuant to Section 401(a)(1) of the CWA, that applicable water quality standards will not be violated. The applicant will be applying for the State certification by separate application.

APPLICANT: Tennessee National, LLC  
12000 Corporate Park Drive  
Loudon, Tennessee 37774

LOCATION: Mile 583.3, left bank, Tennessee River (Watts Bar Lake), in Loudon County, Tennessee, Lat 35°46'10", Lon 84°23'43", Cave Creek USGS Quad map (Exhibit A).

DESCRIPTION: The proposed work consists of the construction of a community dock to provide an amenity for the Tennessee National residential development. A natural walkway is planned along the edge of the river that will pass through sections of native riparian vegetation. The applicant states that the upland portion of the development would be designed to minimize the construction of buildings and permanent structures within the existing TVA flowage easement.

Community dock. The proposed community dock would be built in phases as dictated by demand. Construction would consist of 20 floating docks (A-L and N-U) containing a total of 127 double slips and 23 single slips. A transient dock (M) would be built to

provide access to two fuel dispensers and a sewage pump-out station. The boat docks would extend into the reservoir from 97' to 153' measured from the normal summer pool (NSP) shoreline, Elevation 741.0. Proposed dock dimensions and capacities are provided in Table 1. The main walkways and slip fingers would be 8' and 4', respectively. The floating docks would be connected to the shoreline by 4' wide and 40' to 80' long gangways. The community dock facilities will observe guidelines established in TVA's Tennessee Valley Clean Marina Initiative. Individual water-use facilities will not be allowed on this development. During the initial planning stages, the applicant developed and assessed several dock iterations. Some of the designs incorporated large basins that would have required extensive excavation/dredging and shoreline revetment.

Boat Launching. A three-lane concrete boat ramp would be built at the eastern terminus of the community dock. The ramp would be constructed at a 13% slope and extend approximately 50' into the lake measured from the NSP contour. The bottom of the ramp would be at El. 731, i.e., 4' below the lake's normal winter pool (NWP), El. 735. The toe of the ramp would be protected with riprap. Each of the three planned ramp lanes would be 16'x89'. One floating staging dock measuring 8'x165' and another floating dock measuring 10'x171' would be located at the ramp.

Dredging. Approximately 51,200 cubic yards (CY) of material would be excavated from a 50' wide (average) by 2,800' long area using land-based equipment during winter pool levels. The remaining 19,700 CY of material would be dredged from a barge. The excavated area would be deepened to El. 727 to ensure sufficient navigation depths. The removed material would be loaded into trucks and transported to an upland location within the applicant's property, approx. one mile from the community dock location. The material would be properly deposited, contained, and stabilized.

Bank Stabilization. Riprap revetment would be installed along 2,800' of shoreline at a 2:1 slope to reduce erosion potential and stabilize the riverbank. The protection would average 32' in height. Approx. 8,300 CY of material would be placed below NSP. A riparian buffer consisting of native vegetation would be established along portions of the shoreline. The buffer is intended to provide shoreline stabilization, wildlife habitat, stormwater filtering, and an aesthetic amenity.

Plans of the proposed work are attached to this notice.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of

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the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b)(1) of the CWA (40 CFR Part 230). A permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers (Corps) is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

An Environmental Assessment will be prepared by this office prior to a final decision concerning issuance or denial of the requested Department of the Army Permit.

The Corps and TVA have mutually agreed that TVA is designated as the lead federal agency to fulfill the collective federal responsibilities under Section 106 for permitting actions concerning the proposed commercial developments called Tennessee National Golf Course. The Corps authorizes TVA to conduct Section 106 coordination and consultation on its behalf when approvals pursuant to Section 26a and Section 10 and/or Section 404 are required for these projects. Copies of this notice are being sent to the office of the State Historic Preservation Officer.

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In July 2006, a mussel survey was conducted along transects set on the back chute of Matlock Island. No threatened or endangered mussel species were identified by the survey. Based on available information, the proposed work will not destroy or endanger any federally-listed threatened or endangered species or their critical habitats, as identified under the Endangered Species Act. Therefore, we have reached a no effect determination, and initiation of formal consultation procedures with the U.S. Fish and Wildlife Service is not planned at this time.

Other federal, state, and/or local approvals required for the proposed work are as follows:

a. Tennessee Valley Authority (TVA) approval under Section 26a of the TVA Act. In addition to other provisions of its approval, TVA would require the applicant to employ best management practices to control erosion and sedimentation, as necessary, to prevent adverse aquatic impacts.

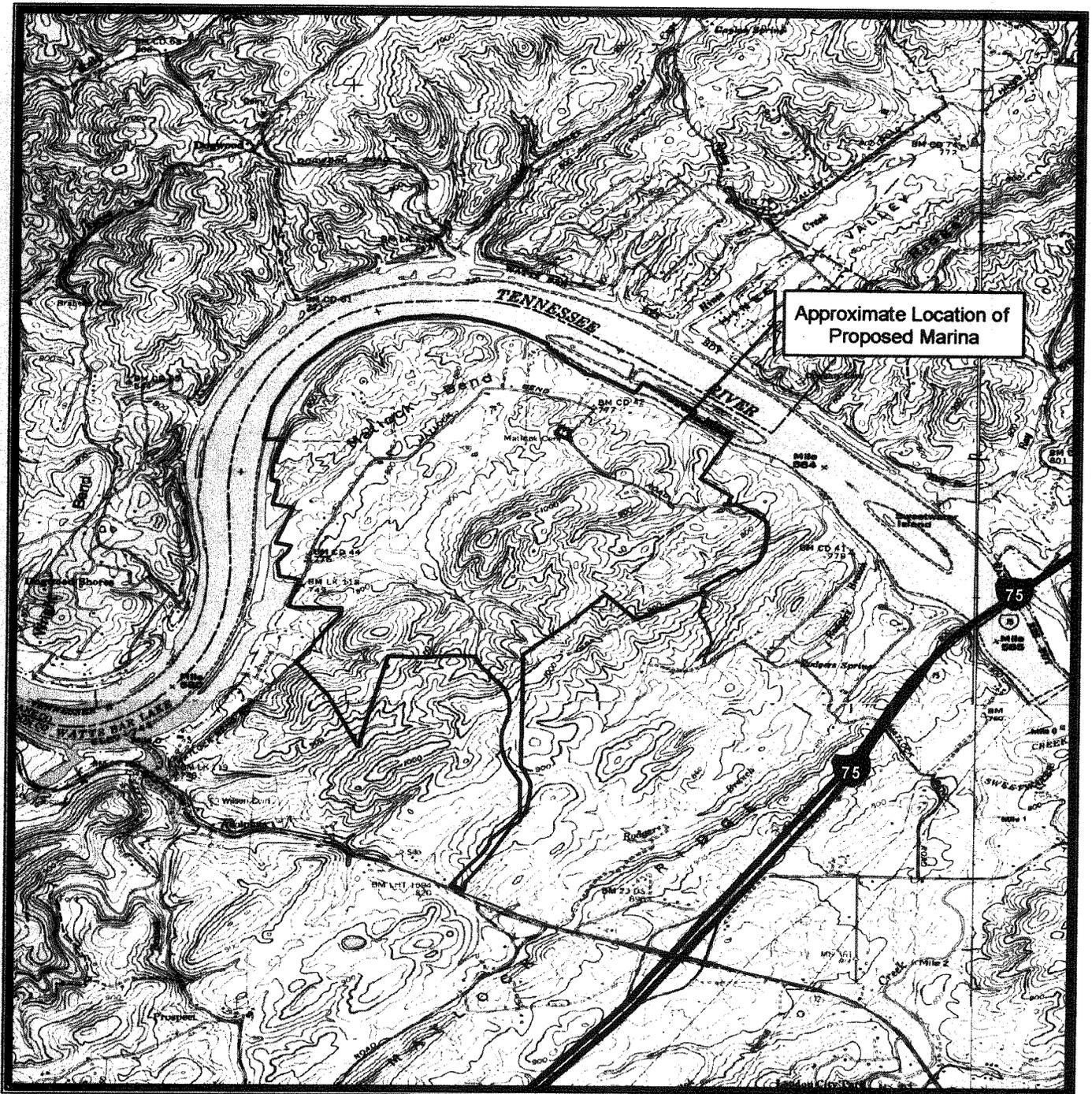
b. Water quality certification from the State of Tennessee in accordance with Section 401(a)(1) of the Clean Water Act.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Public hearing requests shall state, with particularity, the reasons for holding a hearing.

Written statements received on or before January 12, 2008, will become a part of the record and will be considered in the determination. Any response to this notice should be directed to the Regulatory Branch, Attention: J. Ruben Hernandez, at the above address, telephone (615) 369-7519. It is not necessary to comment separately to TVA since copies of all comments will be sent to that agency and will become part of its record on the proposal. However, if comments are sent to TVA, they should be mailed to Mr. Anthony D. Summitt, Watts Bar-Clinch Watershed Team, 260 Interchange Park Drive (LCB 1A-LCT), Lenoir City, Tennessee 37772-5664. Any comments relative to the §401 Water Quality Certification must be sent to Mr. Trent Thomas, Tennessee Division of Water Pollution Control, 7th Floor, L&C Annex, 401 Church Street Nashville, Tennessee 37243-1534, telephone (615) 532-0625.

If you received this notice by mail and wish to view all of the diagrams, visit our web site at:  
<http://www.lrn.usace.army.mil/cof/notices.htm>, or contact Mr. Hernandez at the above address or phone number.

Figure 1. Tennessee National development located on Matlock Bend in Loudon, Tennessee as shown on the Cave Creek, Tennessee 7.5- minute USGS Topographic Quadrangle.



Source: USGS 7.5-minute Cave Creek, Tennessee Topographic Quadrangle



0 2,500 5,000 Feet



### Legend

—— Tennessee National Property

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT A

Prepared by:

**BDY** NATURAL SCIENCES CONSULTANTS  
 2004 21st Avenue South, Nashville, Tennessee 37212 P. 615.460.9797 F. 615.460.9796

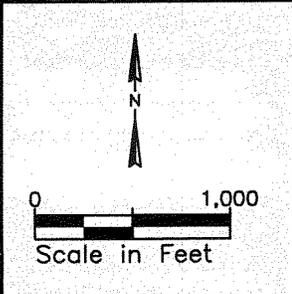
Prepared for:

Tennessee National, LLC  
 Marina Permit Application

PROJECT SITE  
LOCATION

TENNESSEE NATIONAL  
MARINA

TENNESSEE NATIONAL  
DISPOSAL SITE



TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT B

SOURCE:  
 AERIAL PHOTOGRAPH PROVIDED  
 BY LAND DESIGN, INC.

**BDY** BREEDLOVE, DENNIS  
 YOUNG & ASSOCIATES, INC.  
 Environmental Consultants  
 133 HOLIDAY COURT SUITE 210, FRANKLIN, TENNESSEE 37067  
 Phone: (615) 599-1996 Fax: (615) 599-1996

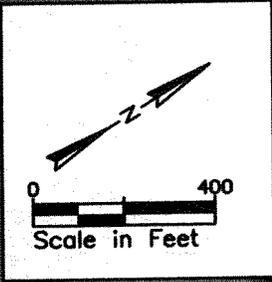
PROJECT SITE MAP &  
 DISPOSAL SITE

Project no.  
 06-1285

Drawn by  
 R.C.W.

Date  
 08/29/2006

TENNESSEE NATIONAL MARINA  
 SHEET 02 of 16



**NOTES:**  
 1) AERIAL PHOTOGRAPH PROVIDED BY LAND DESIGN, INC.  
 2) UPLAND TOPOGRAPHIC SURVEY PROVIDED BY LAND DESIGN, INC.  
 3) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.  
 4) CONTOURS ARE MEASURED IN FEET AND REFERENCED TO MSL.

SHEET 9

AREA TO BE DREDGED

BOAT RAMP

SHEET 8

**BDY** NATURAL SCIENCES CONSULTANTS  
2000 Hwy 58, Nashville, TN 37217 P: 615-440-4797 F: 615-440-3796

**DREDGE & EXCAVATION PLAN**

Project no.  
06-1285

Drawn by  
R.C.W.

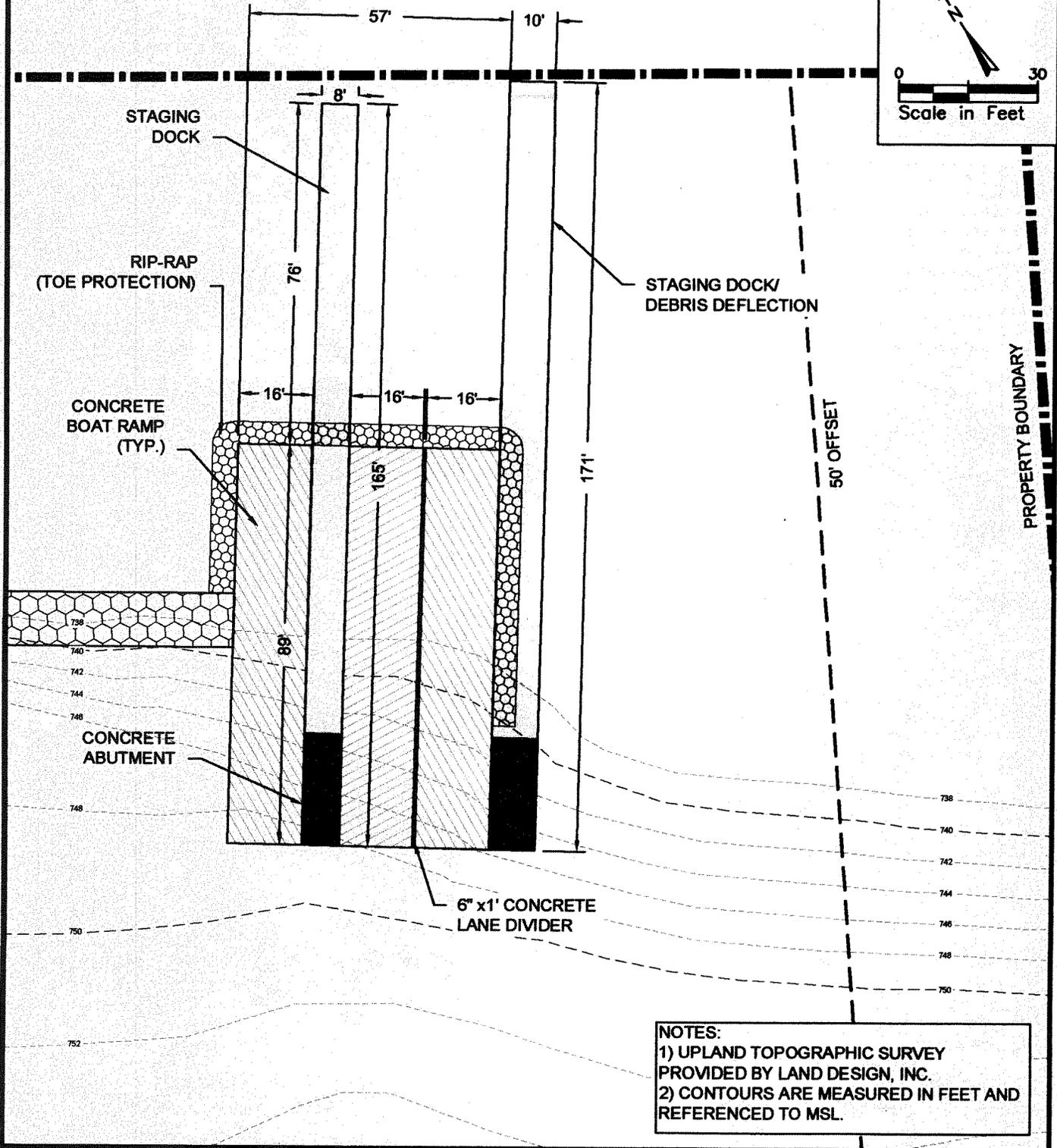
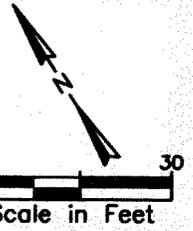
Date  
04/25/2007

**TENNESSEE NATIONAL MARINA**

Sheet 7

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT C

TENNESSEE RIVER



NOTES:  
 1) UPLAND TOPOGRAPHIC SURVEY PROVIDED BY LAND DESIGN, INC.  
 2) CONTOURS ARE MEASURED IN FEET AND REFERENCED TO MSL.

**BDY** NATURAL SCIENCES CONSULTANTS  
1001 7th Avenue South, Nashville, Tennessee 37203 Phone: 615.262.0799 Fax: 615.262.0786

**PROPOSED  
 BOAT RAMP**

Project no.  
 06-1285

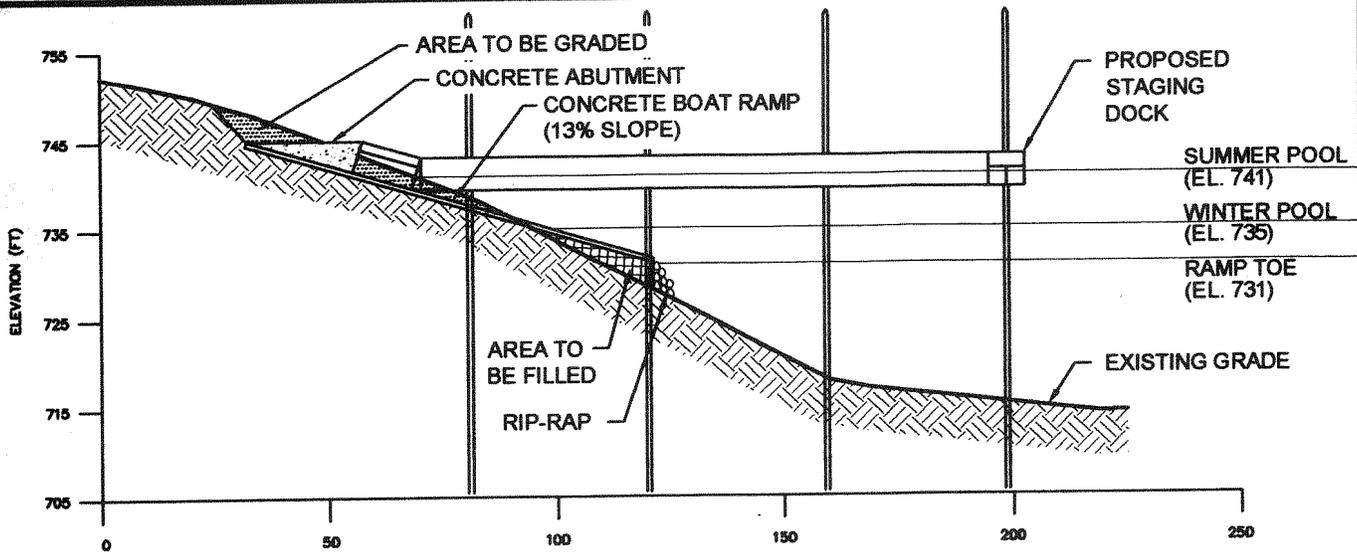
Drawn by  
 R.C.W.

Date  
 04/25/2007

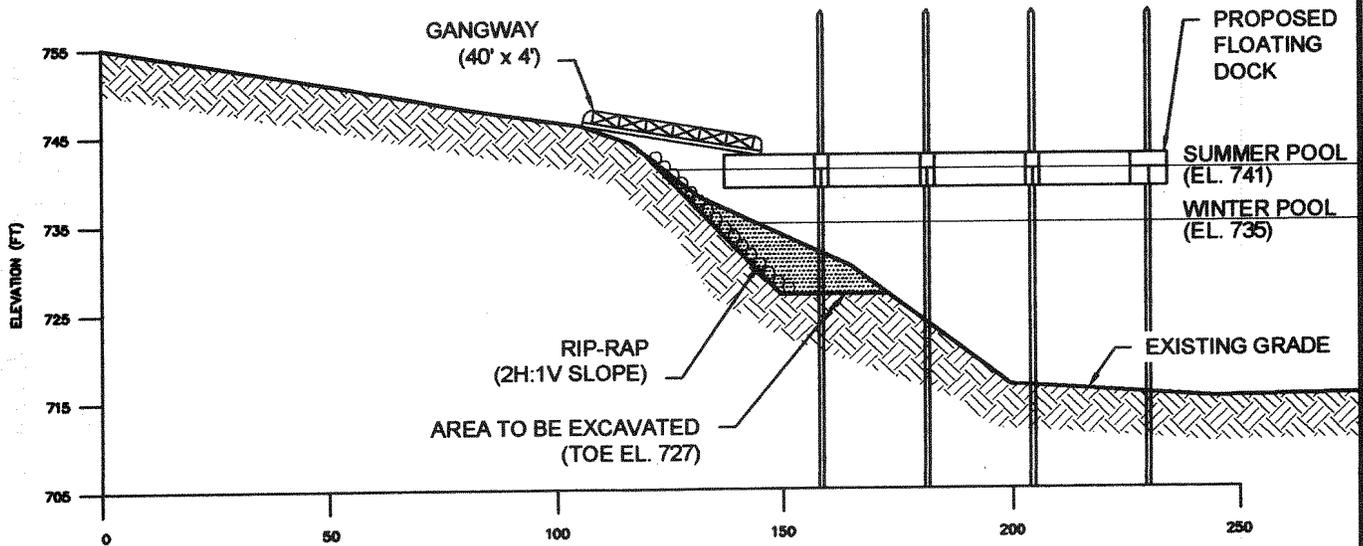
**TENNESSEE NATIONAL MARINA**

Sheet 6

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT D



**A SECTION AA**  
11/13 DISTANCE (ft)



**B SECTION BB**  
11/13 DISTANCE (ft)

NOTES:  
 1) UPLAND TOPOGRAPHY PROVIDED BY LAND DESIGN, INC.  
 2) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.  
 3) PROFILES ARE MEASURED IN FEET AND REFERENCED TO MSL.

**BDY NATURAL SCIENCES CONSULTANTS**  
1204 1/2 Adams Avenue Nashville Tennessee 37203 Phone: 615-255-0797 Fax: 615-255-0720

**DREDGING & EXCAVATION CROSS-SECTIONS**

Project no.  
06-1285

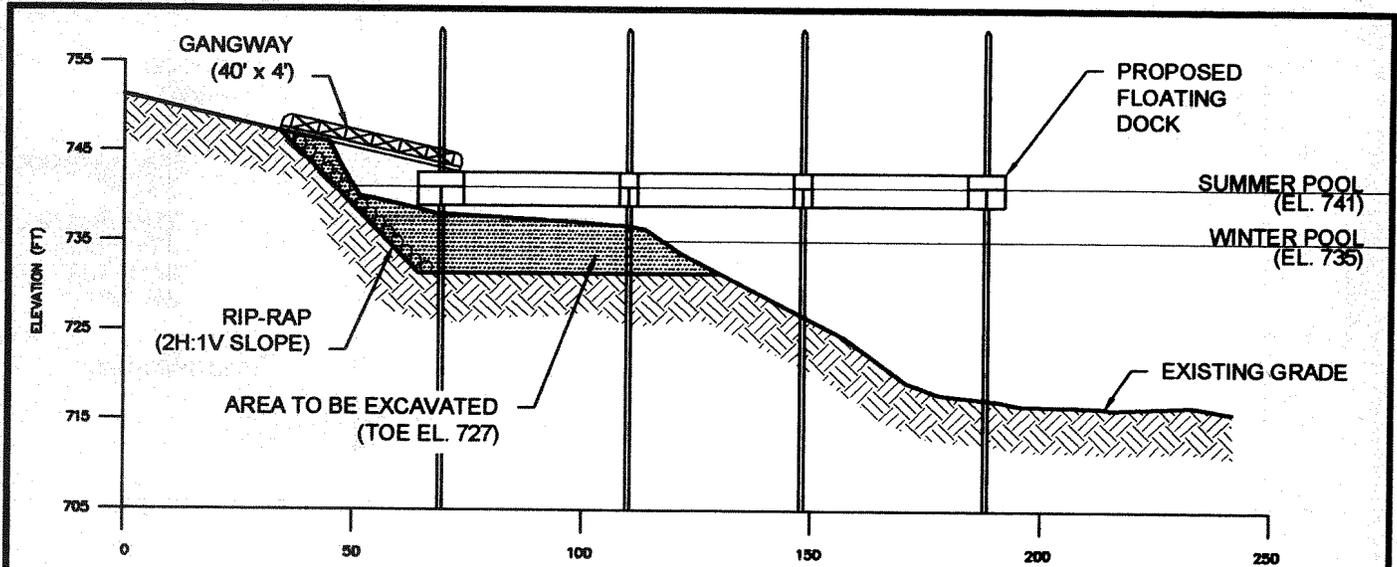
Drawn by  
R.C.W.

Date  
04/25/2007

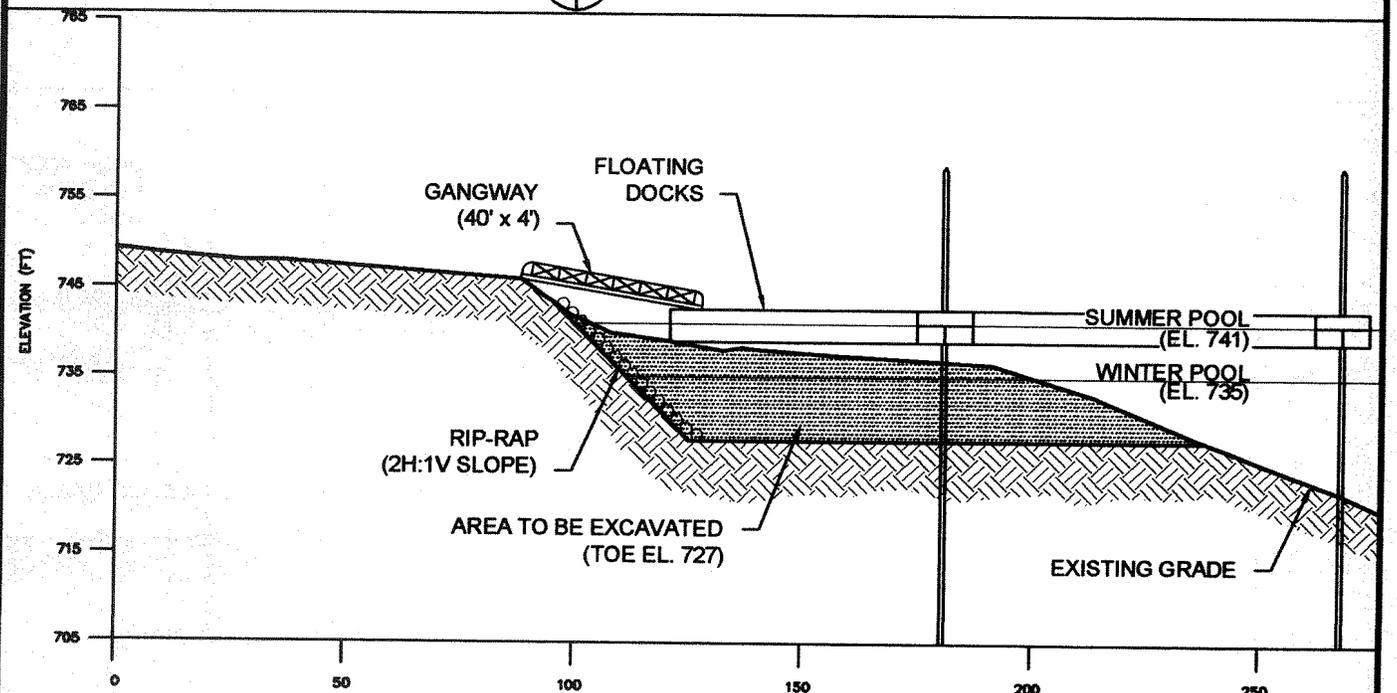
**TENNESSEE NATIONAL MARINA**

Sheet 10

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT E



**C SECTION CC**  
 11/14 DISTANCE (ft)



**D SECTION DD**  
 12/14 DISTANCE (ft)

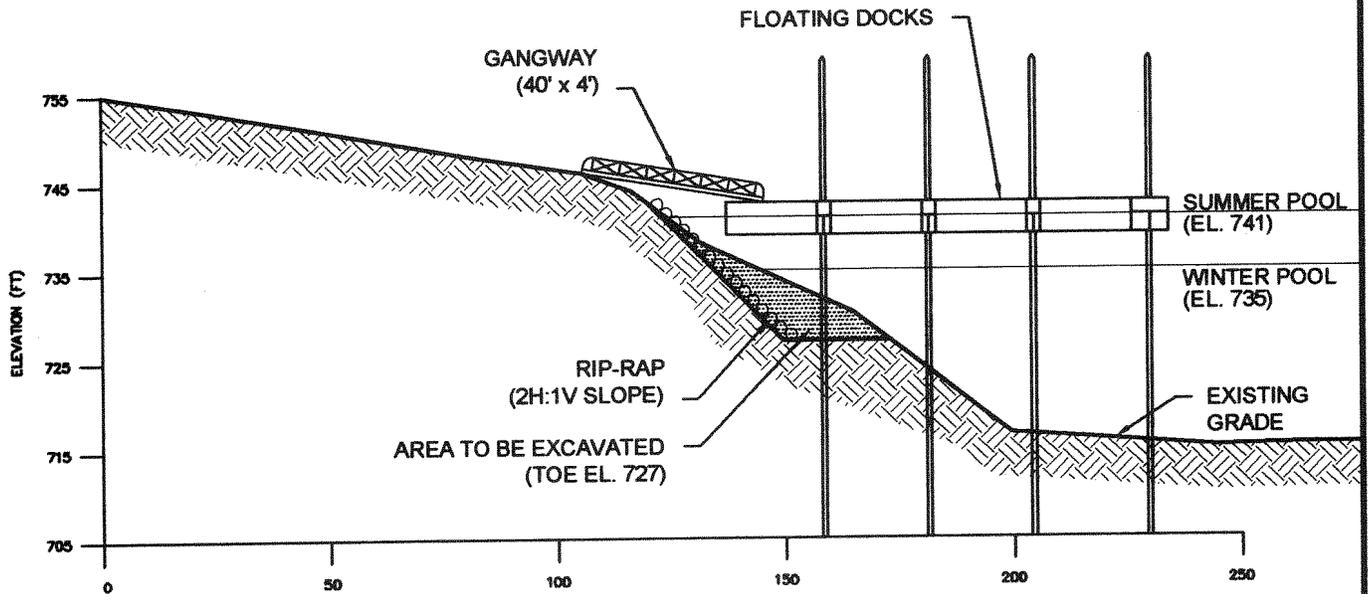
- NOTES:  
 1) UPLAND TOPOGRAPHY PROVIDED BY LAND DESIGN, INC.  
 2) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.  
 3) PROFILES ARE MEASURED IN FEET AND REFERENCED TO MSL.

**BDY NATURAL SCIENCES CONSULTANTS**  
2041 The Avenue, South Nashville, Tennessee 37212 P: 615.462.9700 F: 615.462.9704

**DREDGING & EXCAVATION CROSS-SECTIONS**

Project no. 06-1285	Drawn by R.C.W.	Date 04/25/2007
<b>TENNESSEE NATIONAL MARINA</b>		
Sheet 11		

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT F



**E** SECTION BB  
 12/15 DISTANCE (ft)

**NOTES:**

- 1) UPLAND TOPOGRAPHY PROVIDED BY LAND DESIGN, INC.
- 2) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.
- 3) PROFILES ARE MEASURED IN FEET AND REFERENCED TO MSL.

**BDY** NATURAL SCIENCES CONSULTANTS  
1200 7th Avenue, Suite 1000, Nashville, Tennessee 37203-1400 (615) 259-4400

**DREDGING &  
 EXCAVATION  
 CROSS-SECTIONS**

Project no.  
 06-1285

Drawn by  
 R.C.W.

Date  
 04/25/2007

**TENNESSEE NATIONAL MARINA**

Sheet 12

TENNESSEE NATIONAL, LLC  
 FILE NO. 200701161  
 P.N. NO. 07-95  
 EXHIBIT G

**Table 1. Proposed dock specifications for the proposed Tennessee National Marina.**

Dock	Type	Double Loaded Slip	Single Loaded Slip	Slip Dimensions	Dock Length
A	Floating	3	1	20' X 20'	97'
B	Floating	6	2	20' X 20'	97'
C	Floating	6		25' X 25'	105'
D	Floating	6		25' X 25'	105'
E	Floating	6		30' X 30'	113'
F	Floating	6		30' X 30'	120'
G	Floating	6		35' X 35'	118'
H	Floating	6		35' X 35'	118'
I	Floating	6		35' X 35'	118'
J	Floating	6		35' X 35'	118'
K	Floating	6	2	30' X 30'	125'
L	Floating	6	2	30' X 30'	135'
M	Floating	Transient Dock		75' X 100'	153'
N	Floating	6	2	30' X 30'	131'
O	Floating	8	2	30' X 30'	131'
P	Floating	8	2	25' X 25'	134'
Q	Floating	8	2	25' X 25'	134'
R	Floating	8	1	25' X 25'	134'
S	Floating	6	2	25' X 25'	110'
T	Floating	8	2	20' X 20'	111'
U	Floating	8	2	20' X 20'	111'

TENNESSEE NATIONAL, LLC  
FILE NO. 200701161  
P.N. NO. 07-95  
EXHIBIT H

**Appendix B**  
**Dredge Spoil Dewatering Plan**



**Appendix C**  
**Water Quality Certification**



TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION  
DIVISION OF WATER POLLUTION CONTROL  
401 CHURCH STREET  
7<sup>th</sup> FLOOR L & C ANNEX  
NASHVILLE, TENNESSEE 37243-1534

March 31, 2008

David Cecchele  
General Manager  
Tennessee National, LLC  
12000 Corporate Park Drive  
Loudon, TN 37774

**Subject: Aquatic Resource Alteration Permit NRS 07.306  
Watts Bar Reservoir Dredging and Shoreline Stabilization, Loudon County**

Dear Mr. Cecchele:

We have reviewed your application for the proposed dredging, shoreline stabilization, and boat ramp installation on the Watts Bar reservoir. Pursuant to the *Tennessee Water Quality Control Act of 1977* (T. C. A. § 69-3-101 et seq.) and supporting regulations, the Division of Water Pollution Control is required to determine whether the activity proposed will violate applicable water quality standards.

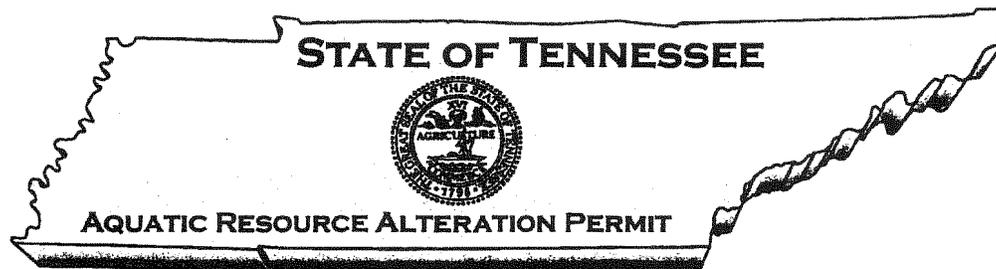
Subject to conformance with accepted plans, specifications and other information submitted in support of application NRS 07.306, the state of Tennessee hereby issues an Aquatic Resource Alteration Permit (enclosed). Failure to comply with the terms of this permit or other violations of the *Tennessee Water Control Act of 1977* is subject to penalty in accordance with T.C.A. § 69-3-115.

It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understood the permit conditions before the project begins. If you need any additional information or clarification, please contact me at 615-532-0700 or by e-mail at trent.thomas@state.tn.us.

Sincerely,

Trent Thomas,  
Natural Resources Section

Cc: Knoxville Environmental Field Office  
Ruben Hernandez, U.S. Army Corps of Engineers, Nashville District  
Tom Welborn, U.S. Environmental Protection Agency, Atlanta, GA  
Anthony Summit, Tennessee Valley Authority, Watts Bar-Clinch Watershed Team  
File copy



## NRS 07.306

Pursuant to the *Tennessee Water Quality Control Act of 1977* (T.C.A. § 69-3-101 et seq.) and supporting regulations, the Division of Water Pollution Control is required to determine whether the activity described below will violate applicable water quality standards.

Subject to conformance with accepted plans, specifications and other information submitted in support of application NRS 07.306, the state of Tennessee hereby authorizes the activity described below.

**PERMITEE:** Tennessee National LLC  
Attn: David Cecchele  
12000 Corporate Park Drive  
Loudon, TN 37774

**AUTHORIZED WORK:** The authorized work includes the dredging of 71,200 cubic yards of sediment and lakebed material, and the installation of 3,200 feet of riprap shoreline stabilization. Associated with the dredging is the construction of three boat ramps (16 ft. by 89 ft. long) and the installation of steel pipes for dock supports.

**LOCATION:** The authorized work is located on the Watts Bar Reservoir (Tennessee River RM 583.3) in Loudon County just northwest of the Interstate-75 bridge. (35.9232°N, -86.8118°W)

**EFFECTIVE DATE:** March 31, 2008

**EXPIRATION DATE:** March 30, 2010

### **SPECIAL CONDITIONS:**

1. The dredging, shoreline stabilization, and boat ramp construction shall take place during the winter-pool elevations (735 MSL) for Watts Bar.
2. The amount of sediment and lakebed material removed shall not exceed 71,200 cubic yards and. The depth of dredging shall not extend past the 727 MSL elevation line.
3. A floating sediment curtain (curtain) shall be installed in the reservoir encompassing the dredging area and maintained throughout the period of dredging in the water column. Before the curtain is removed, a period of time needs to be allowed for the settling of suspended solids. In the event the silt curtain boom is obviously failing, dredging must stop and the curtain must be fixed. The curtain shall have the capability of extending to a sufficient depth that will prevent excavated materials from escaping the containment area. Also, the bottom of the silt boom curtain shall be sufficiently anchored to withstand swift currents. For more information on floating sediment

curtains and installation suggestions, visit the City of Knoxville's Engineering Division website (<http://www.ci.knoxville.tn.us/engineering/>) and review their BMP manual. For your convenience, scanned copies of the floating sediment curtain information is provided in Appendix B.

4. All material dredged or excavated from the reservoir shall be hauled to the upland disposal sites (see Appendix C) and properly stabilized in such a manner as to prevent any materials from reentering the reservoir.
5. The installation of the three boat ramps shall be done in accordance with the *General Permit for the Construction of Launching Ramps and Public Access Structures* (enclosed).

#### GENERAL CONDITIONS:

1. The work shall be accomplished in conformance with the accepted plans (see Appendix A), specifications, data and other information submitted in support of the above application and the limitations, requirements and conditions set forth herein.
2. No impacts to any waters of the state by this project, other than those specifically addressed in the plans and this permit, are allowed. All streams, springs and wetlands shall be fully protected prior, during and after construction until the area is stabilized. Any questions, problems or concerns that arise regarding any stream, spring or wetland either before or during construction, shall be addressed to the Division of Water Pollution Control, Knoxville Environmental Field Office, 865-594-6035. Wetlands outside of the proposed area of impact shall not be used as storage or staging areas for equipment.
3. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3-.03 of the Rules of The Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply and navigation.
4. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the state, including groundwater.
5. Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat is prohibited.
6. This permit does not authorize impacts to cultural, historical or archeological features or sites.
7. It is the responsibility of the applicant to convey all terms and conditions of this permit to all contractors. A copy of this permit, accepted plans, and any other documents pertinent to the activities authorized by this permit shall be maintained on site at all times during periods of construction activity.
8. Work shall not commence until the applicant has received the federal §404 permit from the U. S. Army Corps of Engineers, a §26a permit from the Tennessee Valley Authority or authorization

under a Tennessee NPDES Storm Water Construction Permit where necessary. The applicant is responsible for obtaining these permits.

This permit does not preclude requirements of other federal, state or local laws. This permit may also serve as a federal §401 water quality certification (pursuant to 40 C.F.R. §121.2) since the planned activity was reviewed and the division has reasonable assurance that the activity will be conducted in a manner that will not violate applicable water quality standards (T.C.A. § 69-3-101 et seq. or of § § 301, 302, 303, 306 or 307 of *The Clean Water Act*).

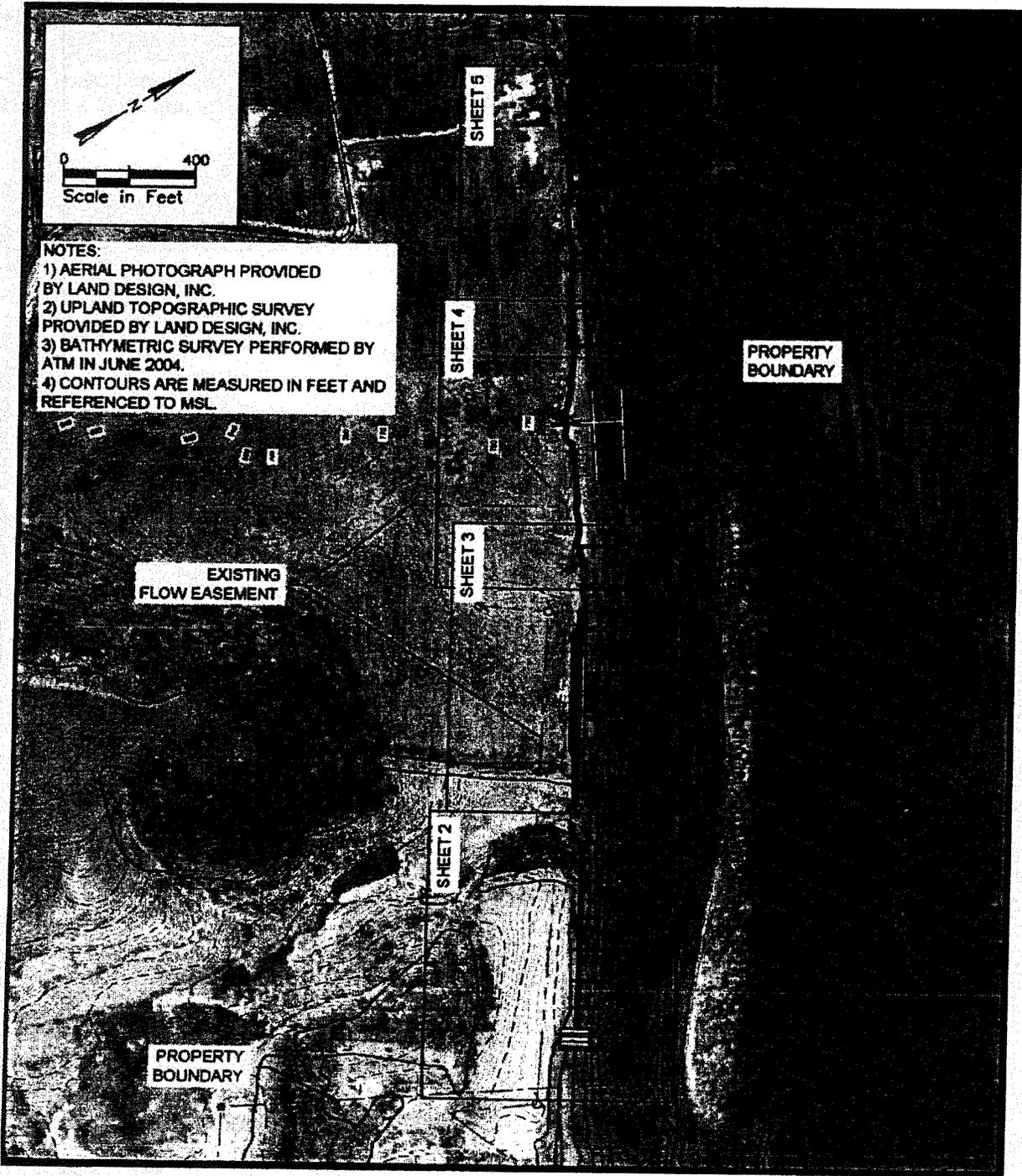
The state of Tennessee may modify, suspend or revoke this permit or seek modification or revocation should the state determine that the activity results in more than an insignificant violation of applicable water quality criteria or violation of the act. Failure to comply with permit terms may result in penalty in accordance with T.C.A. §69-3-115.

An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within 30 days after receipt of the permit. In such petition, each contention should be stated in numbered paragraphs that describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" x 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6<sup>th</sup> Floor L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534. Any hearing would be in accordance with Tennessee Code Annotated Section 69-3-110 and 4-5-301 et seq.

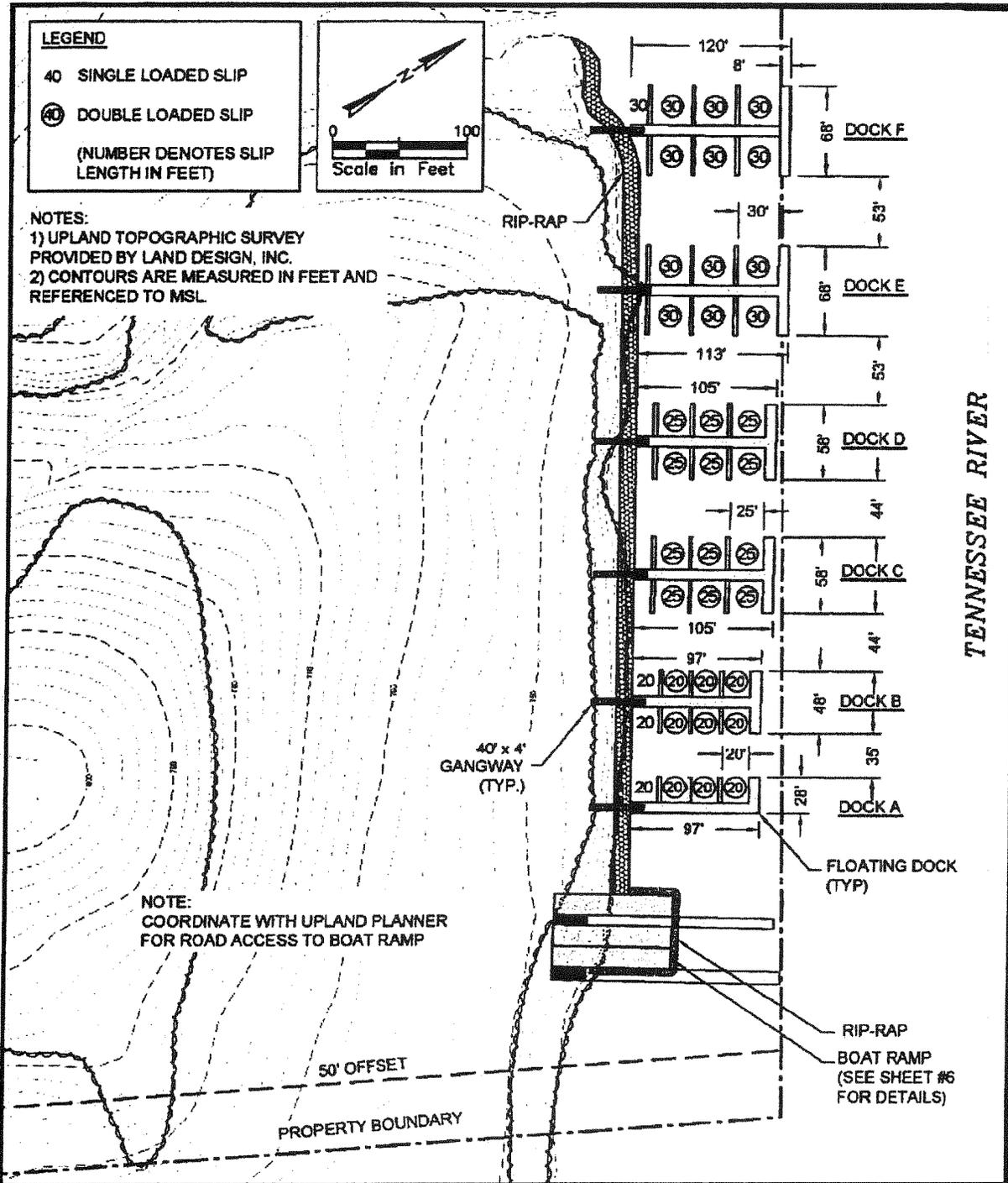


Paul E. Davis, P.E.  
Director, Division of Water Pollution Control

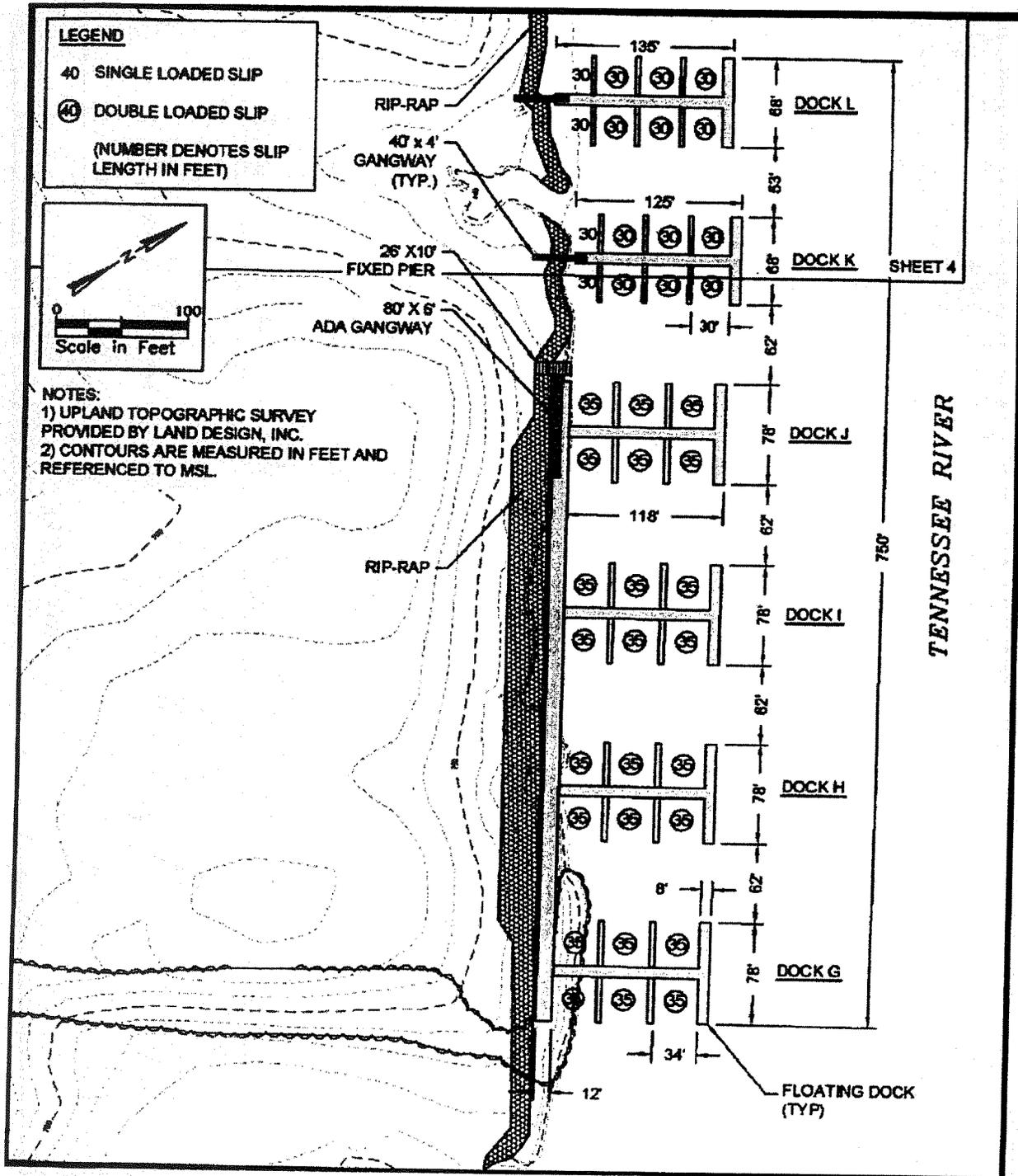
Appendix A



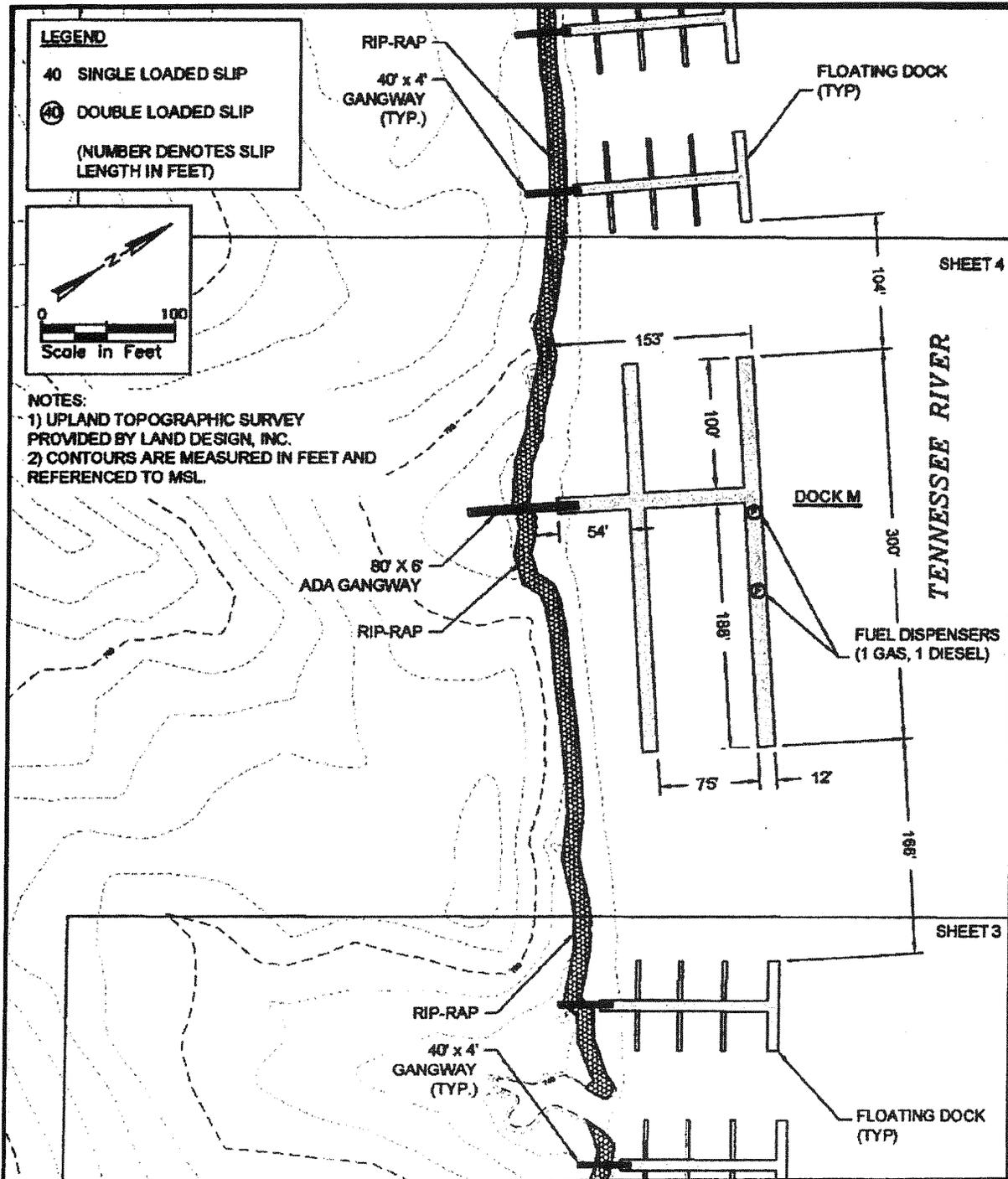
Appendix A (Continued)



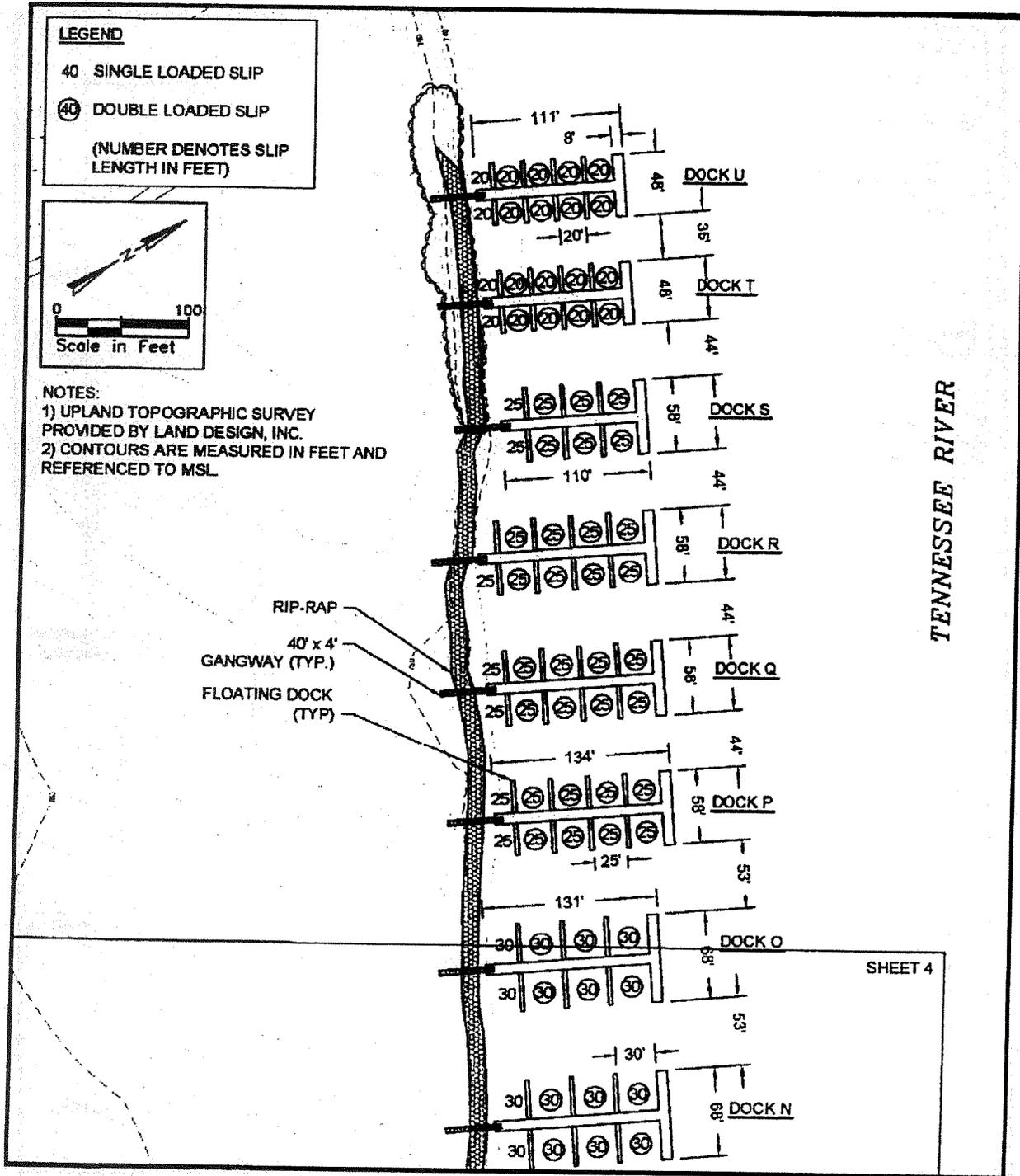
Appendix A (Continued)



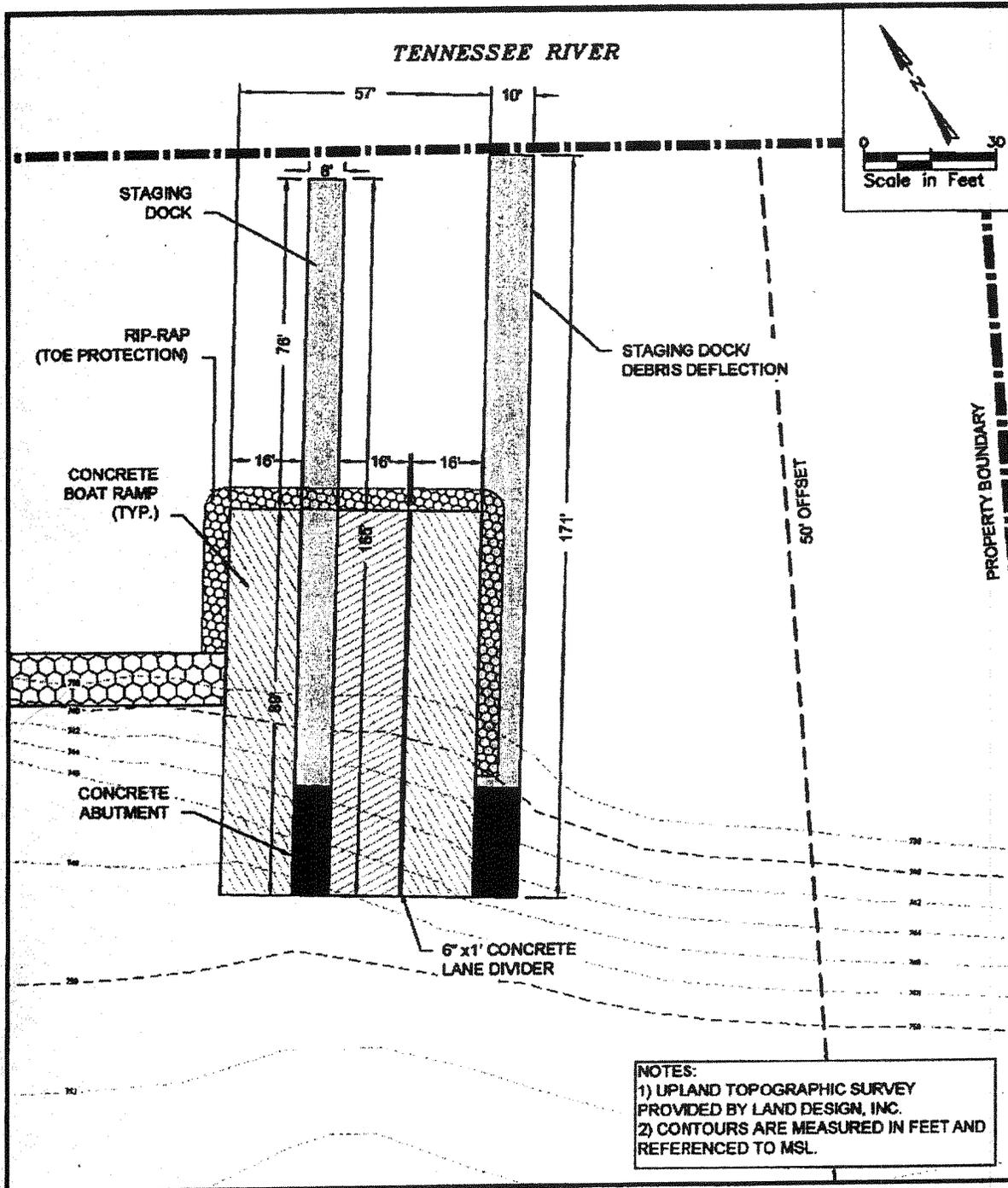
Appendix A (Continued)



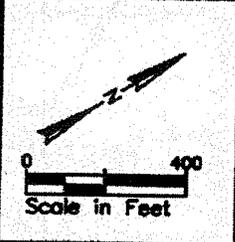
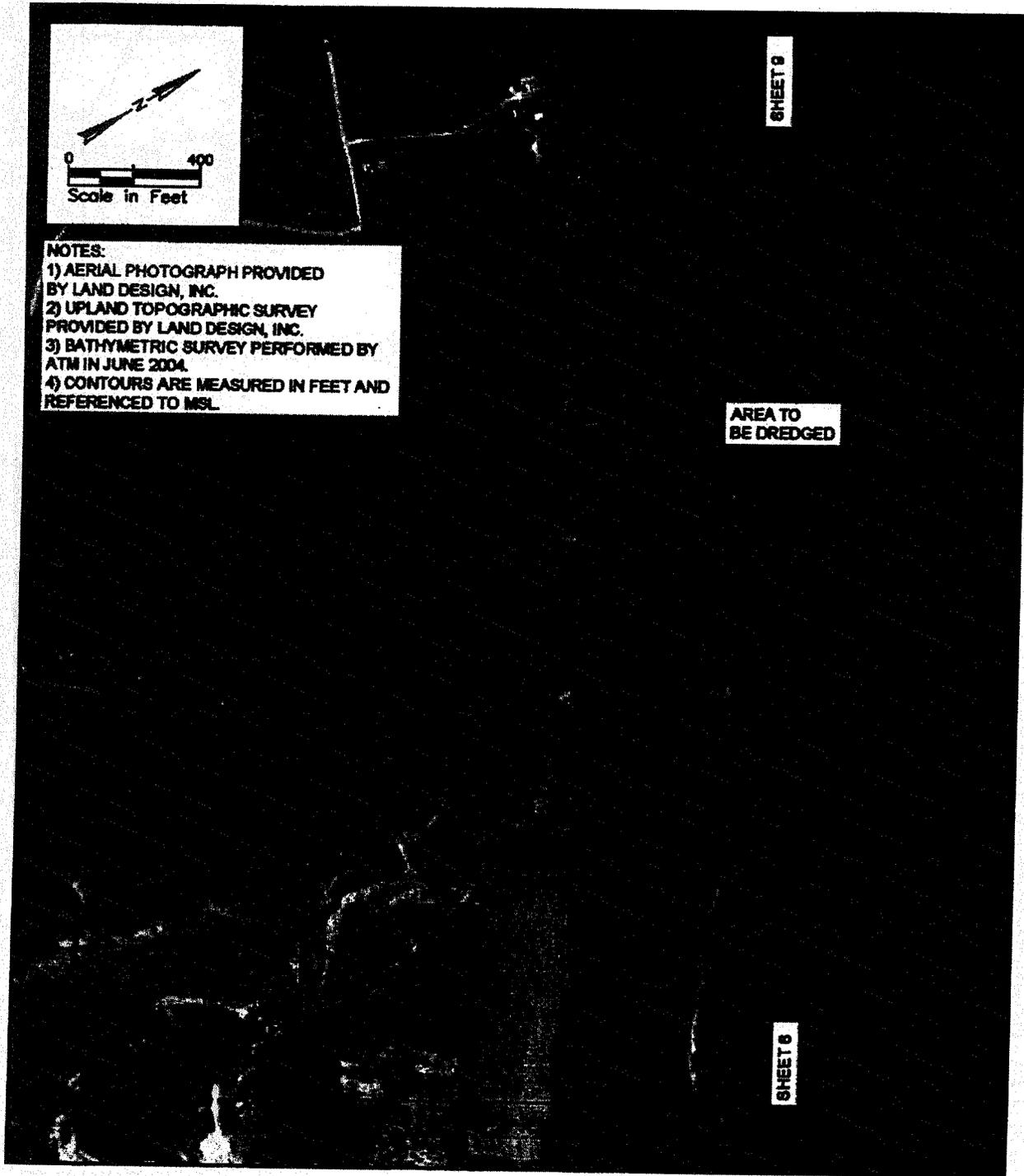
Appendix A (Continued)



Appendix A (Continued)



Appendix A (Continued)



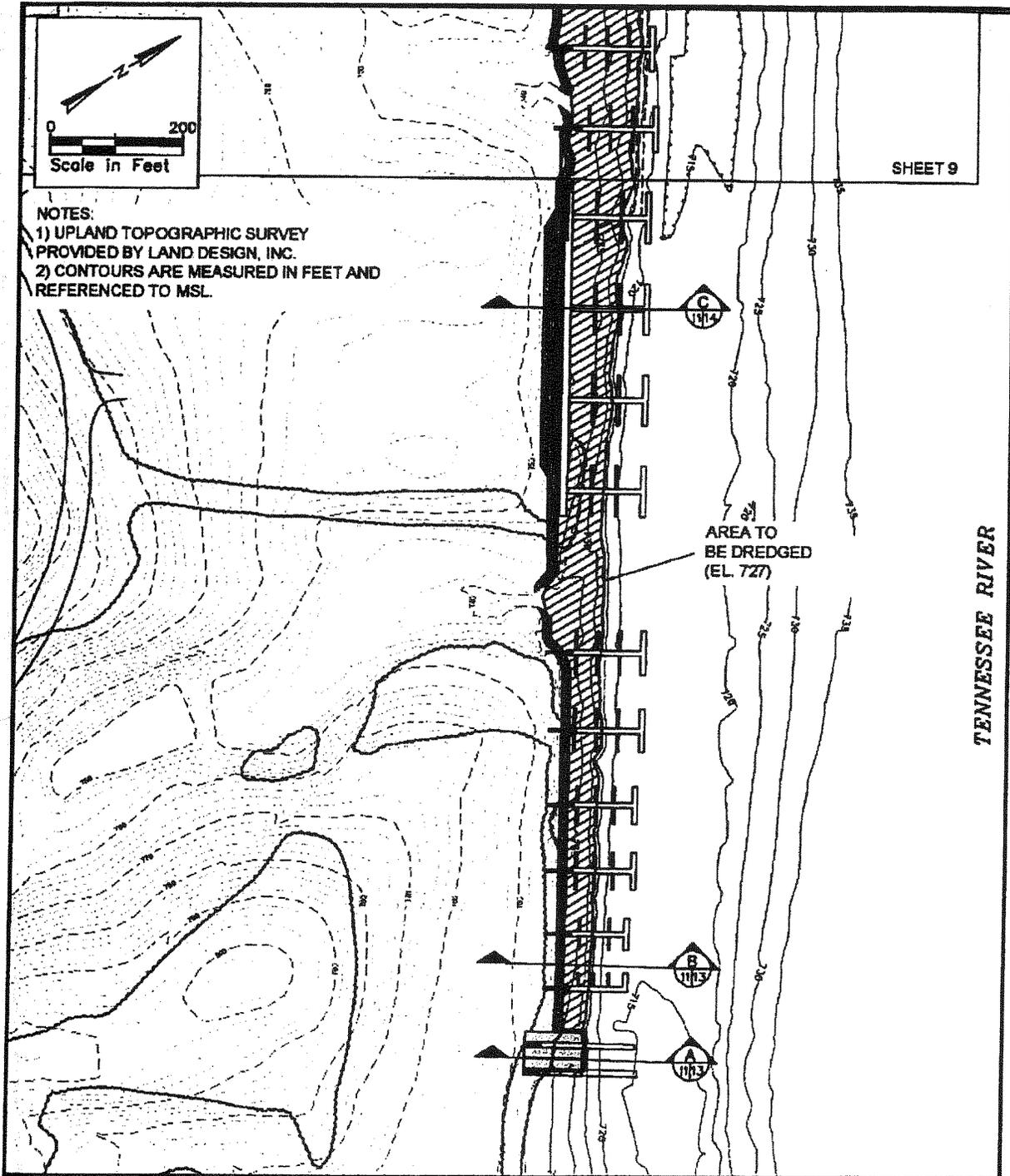
**NOTES:**  
1) AERIAL PHOTOGRAPH PROVIDED BY LAND DESIGN, INC.  
2) UPLAND TOPOGRAPHIC SURVEY PROVIDED BY LAND DESIGN, INC.  
3) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.  
4) CONTOURS ARE MEASURED IN FEET AND REFERENCED TO MSL.

SHEET 9

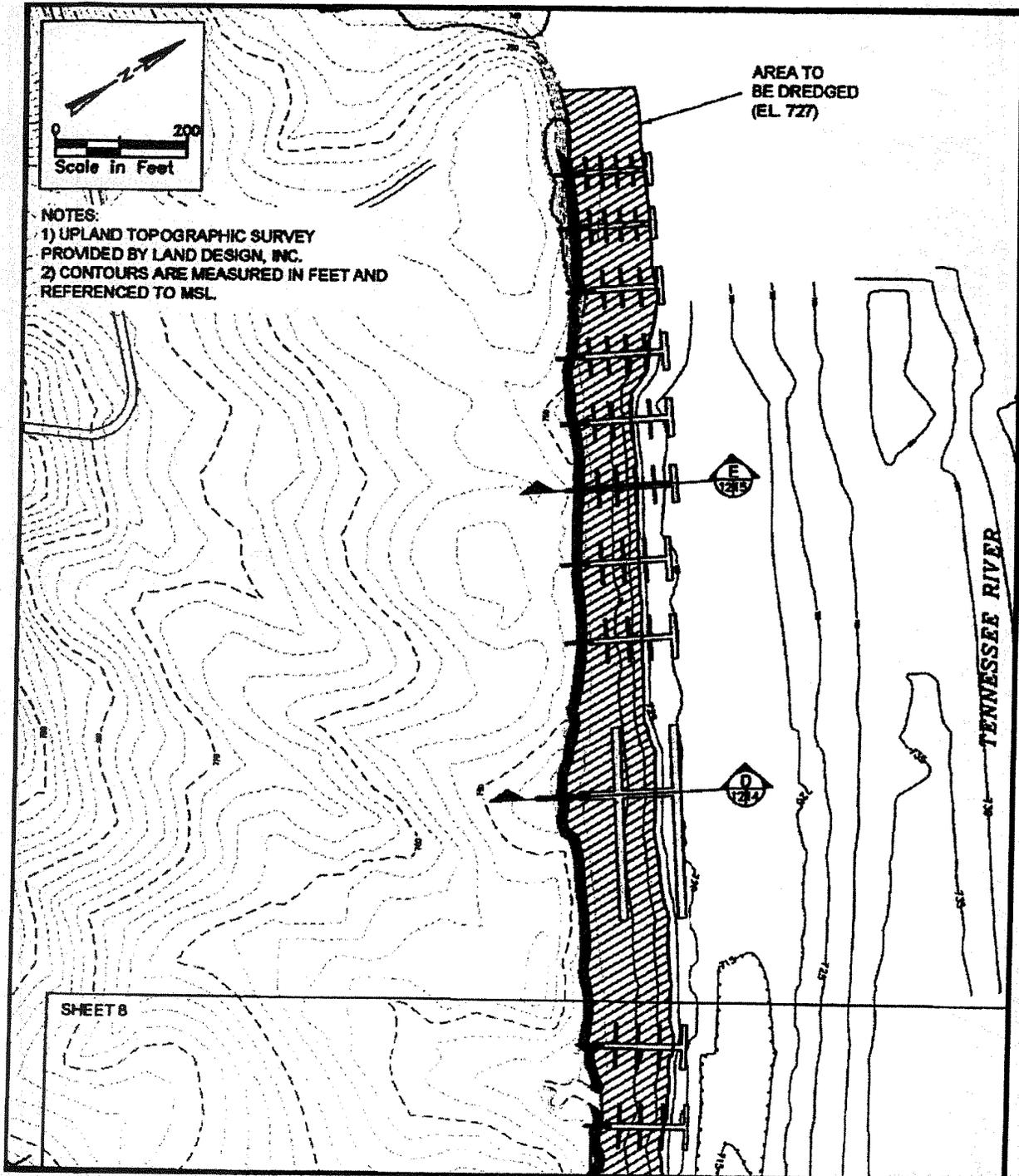
AREA TO BE DREDGED

SHEET 8

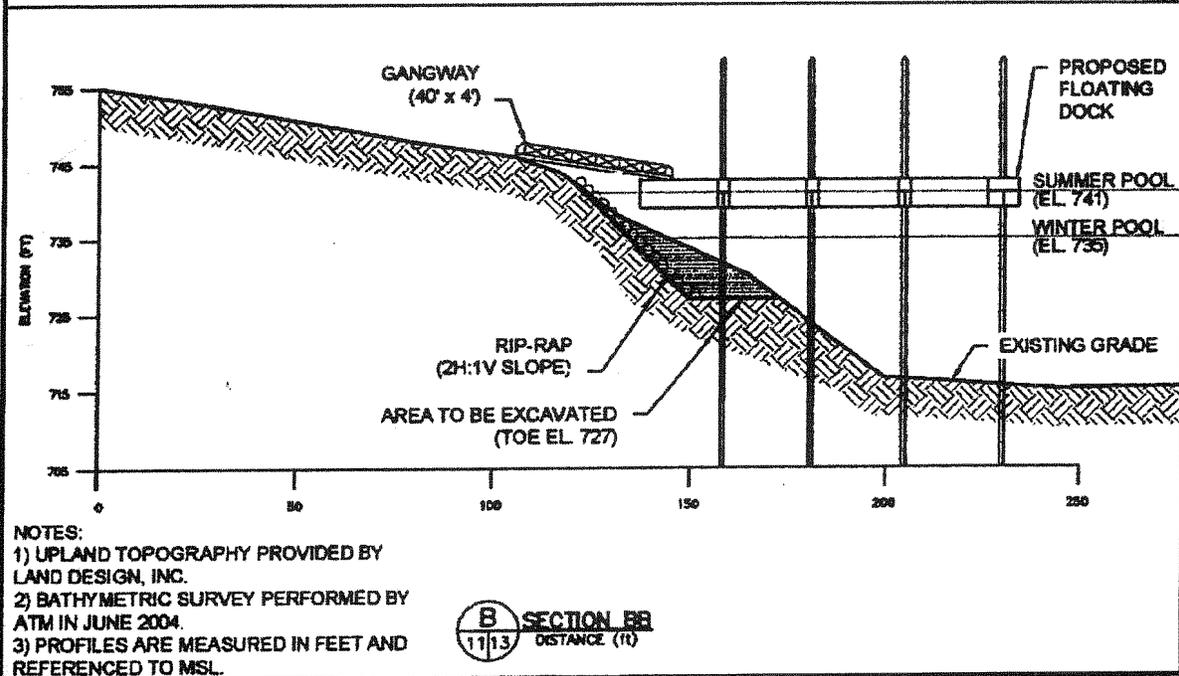
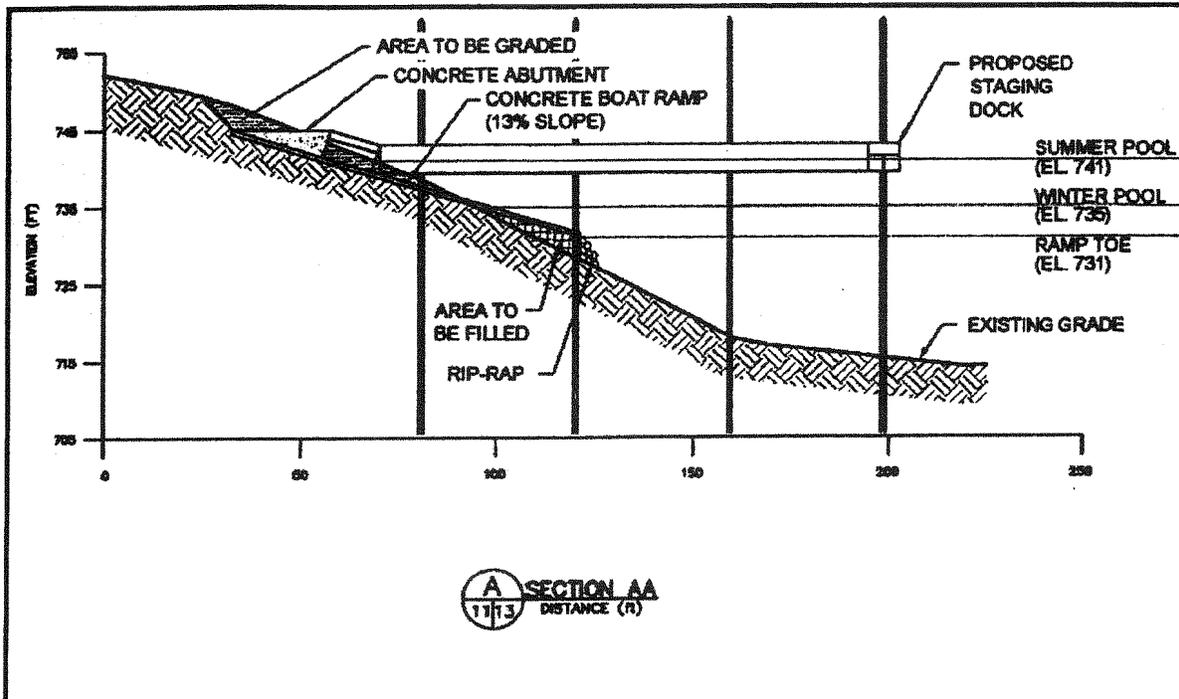
Appendix A (Continued)



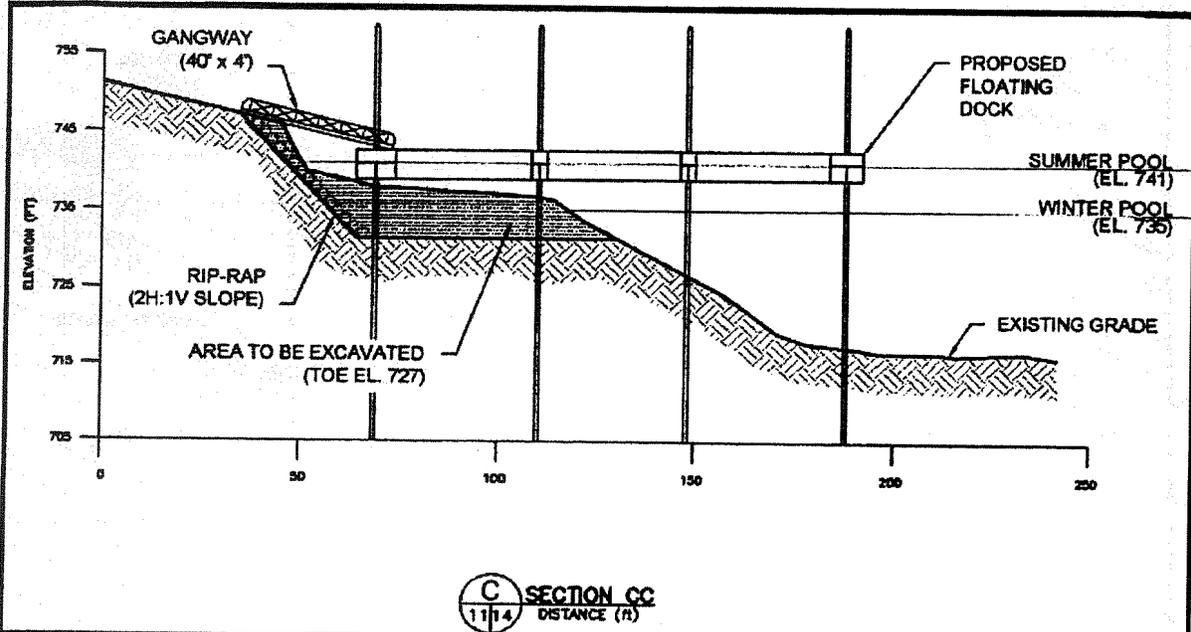
Appendix A (Continued)



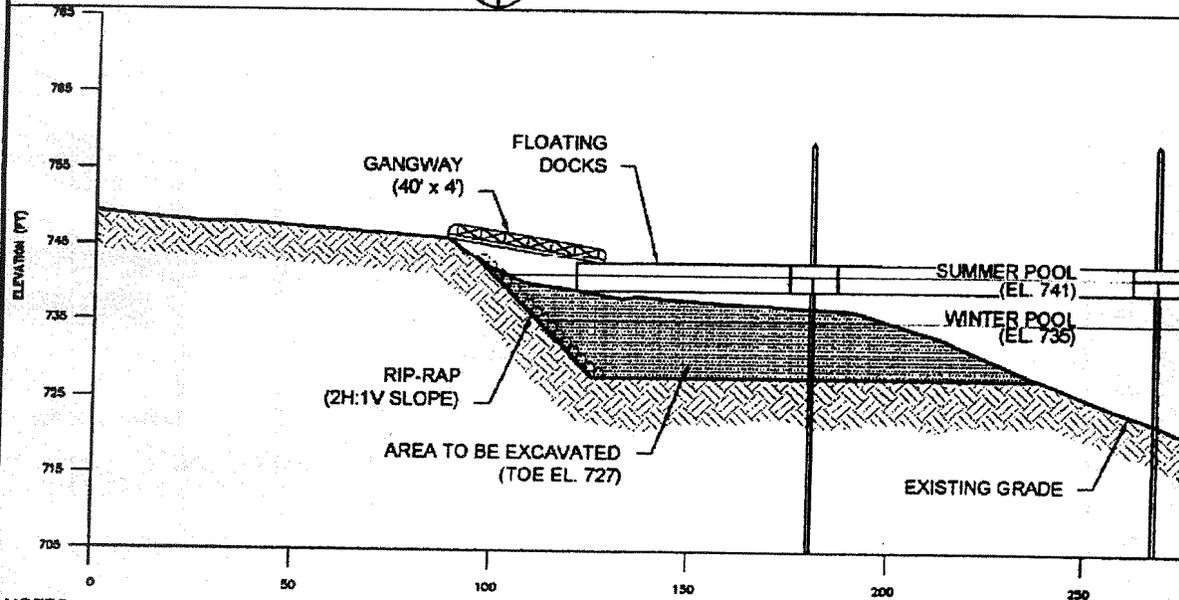
Appendix A (Continued)



Appendix A (Continued)



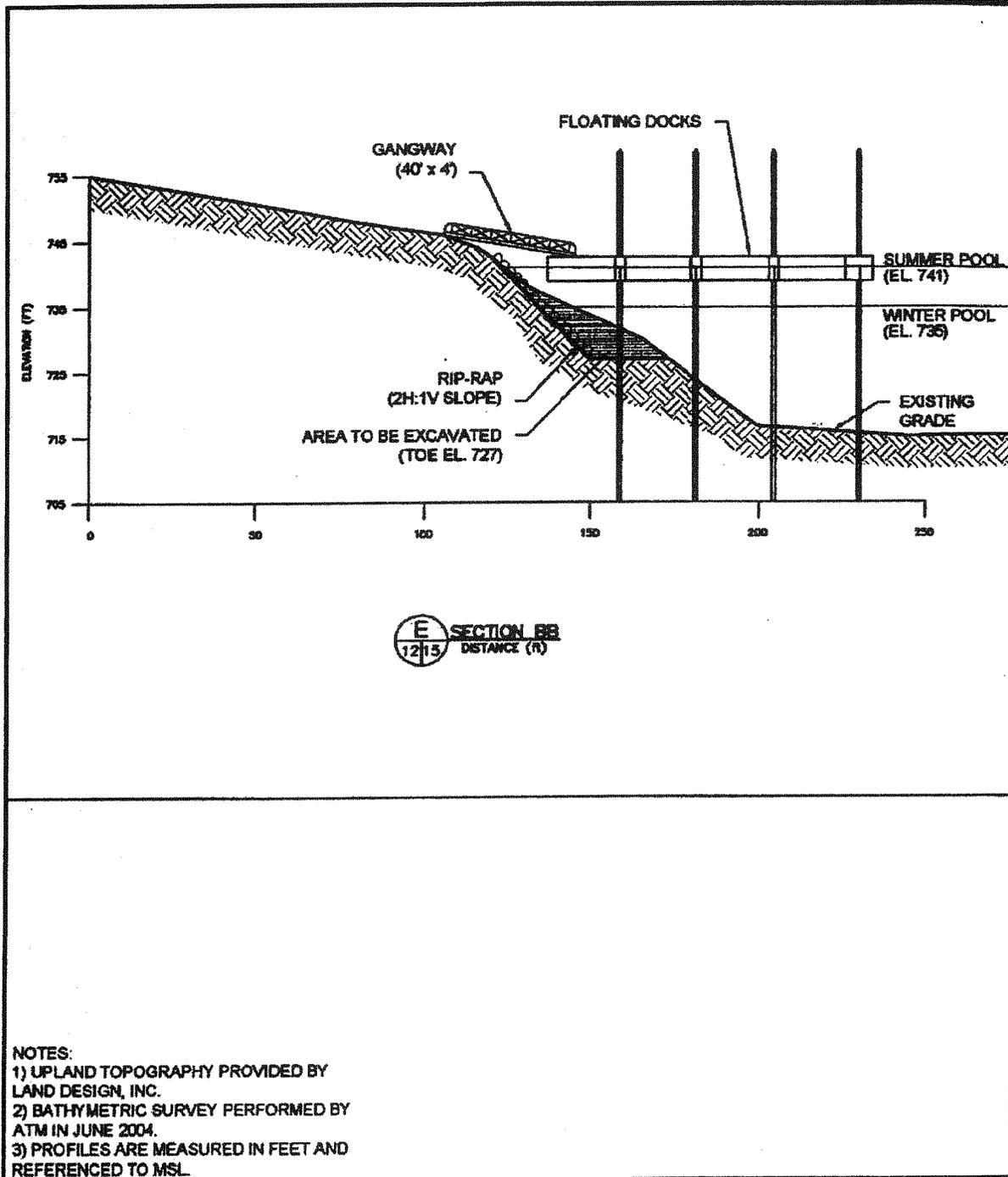
C SECTION C-C  
11/14 DISTANCE (ft)



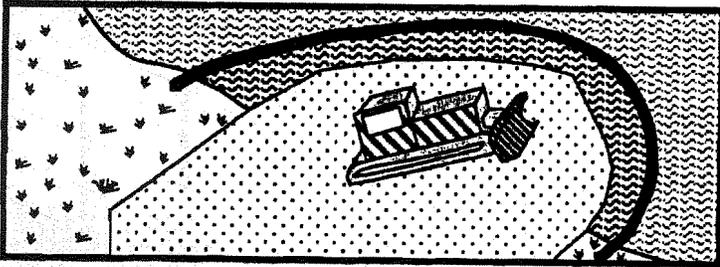
D SECTION D-D  
12/14 DISTANCE (ft)

- NOTES:  
1) UPLAND TOPOGRAPHY PROVIDED BY LAND DESIGN, INC.  
2) BATHYMETRIC SURVEY PERFORMED BY ATM IN JUNE 2004.  
3) PROFILES ARE MEASURED IN FEET AND REFERENCED TO MSL.

Appendix A (Continued)



Appendix B

<b>ACTIVITY:</b> Floating Sediment Curtain	<b>ES - 27</b>
	

Targeted Constituents					
● Significant Benefit		◐ Partial Benefit		○ Low or Unknown Benefit	
● Sediment	○ Heavy Metals	○ Floatable Materials	○ Oxygen Demanding Substances		
○ Nutrients	○ Toxic Materials	○ Oil & Grease	○ Bacteria & Viruses	○ Construction Wastes	

**Description**      A floating sediment curtain is used within a stream, river or lake as a last line of defense to capture sediment and silt. It can also be used in a sediment basin or a settling pond to ensure adequate capture of sediment and silt. A floating sediment curtain will significantly reduce sediment in critical areas such as streams, rivers, and aquatic habitats.

- Suitable Applications**
- Adjacent to banks where construction, grading or excavation will take place up to the edge of water or within the body of water.
  - Within a temporary sediment basin or a settling pond to assist in capture of sediment and silt.
  - For dredging projects.

**Approach**      A floating sediment curtain is made from a heavy geotextile fabric, typically 16 to 20 ounces per square yard, with sufficient properties to capture most types of silt and sediment. Floatation is often achieved by styrofoam or other very light material that will not degrade in water. Geotextile panels are reinforced and sewn to include the flotation material, chains, hooks, and other connection equipment as needed. Geotextile fabric should have ultraviolet inhibitors and adequate strength to match the application without failing.

Any type of construction or project that takes place within "Waters of the State" is regulated by the Tennessee Department of Environment and Conservation (TDEC). The usual definition for Waters of the State is any blue-line stream which is shown on a USGS quadrangle map, or any point downstream from where the blue-line stream begins, including lakes, ponds, and wetlands. See TDEC website for additional information on requirements for an Aquatic Resource Alteration Permit (ARAP), which must be obtained prior to construction, clearing, grading, or any other disturbance near a body of water.

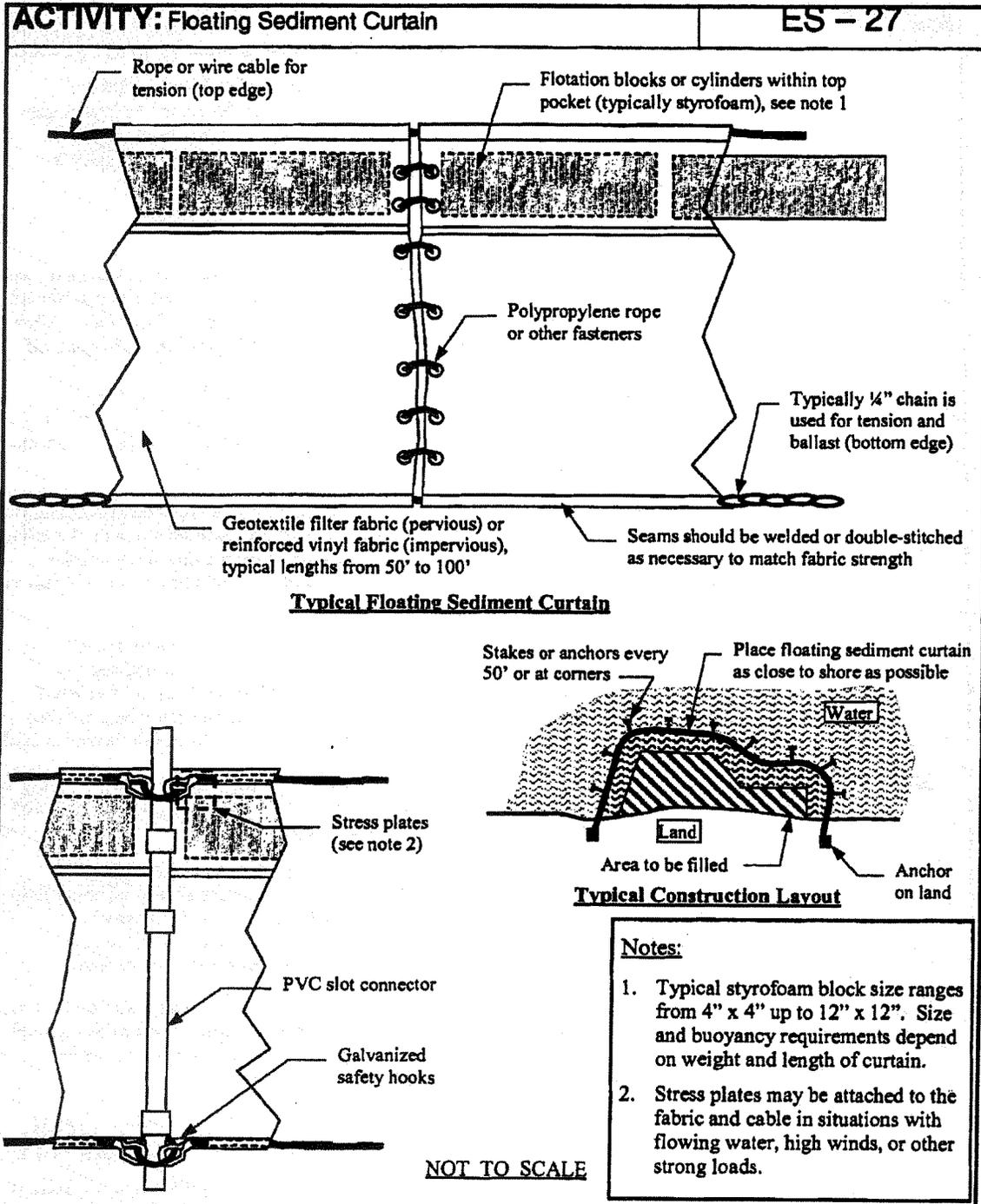
<http://www.state.tn.us/environment/permits/>

Floating sediment curtains are not intended for use across flowing streams or rivers. Although this may appear to be the easiest way to anchor a floating curtain, it is not designed to filter large quantities of flowing water nor can it resist the large forces involved. Floating sediment curtains should not be placed across navigation channels, streams with fish or other migrating aquatic life, or recreational streams.

## Appendix B (Continued)

<b>ACTIVITY:</b> Floating Sediment Curtain	<b>ES - 27</b>	
<p data-bbox="505 436 1325 573">Floating sediment curtains are commercially available with adequate sizes and strengths for almost any application. Follow manufacturer's recommendations and design guidelines when using these products. In most instances, installation will require boats and anchoring hardware for which an experienced subcontractor is recommended.</p> <p data-bbox="505 604 760 636"><i>Design Considerations</i></p> <p data-bbox="505 657 1357 762">Curtains should generally extend from the water surface to the bottom of channel, with a reasonable effort to match the bottom profile of channel. Typically allow 10% extra depth for curtain, and fold the extra depth towards the land side of the curtain. Allow 10% extra length to allow for some curtain flexibility, anchoring points, current, etc.</p> <p data-bbox="505 793 1344 898">The choice of whether to use a pervious material (geotextile filter fabric) or an impervious material (nylon reinforced vinyl) depends on the type of silt or sediment expected. A pervious material will allow small amounts of water to pass through, but is generally insufficient to allow a moving stream to pass through.</p> <p data-bbox="505 930 1357 1056">Curtain joints (as shown in Figure ES-27-1) are typically 50 to 100 feet apart, which allows for flexible deployment choices, easier storage, and reduced stress on the fabric. The alternate connection detail is for situations which have moving water or other stresses, or to assist in anchoring. In general, the curtain should be anchored or staked at every joint using built-in fasteners and loops.</p> <p data-bbox="505 1087 1357 1213">The floating sediment curtain should generally be made of bright colors for visibility, such as yellow or orange, or the curtain should have buoys or floats attached to increase visibility. The floating sediment curtain should have at least 3" freeboard above the water surface. The type and size of buoyant material should be computed to offset the weight of curtain, including the fabric, ropes, chains and other fasteners used.</p> <p data-bbox="282 1245 444 1266"><b>Maintenance</b></p> <ul data-bbox="505 1245 1341 1476" style="list-style-type: none"> <li>■ Inspect floating sediment curtain daily to verify that silt and sediment are not bypassing the curtain. Repair or replace curtain as necessary, using materials and methods recommended by the geotextile manufacturer.</li> <li>■ In shallow areas, trapped sediment can be more easily removed than in deep waters. If the curtain has some excess length, it may be possible to carefully raise the bottom edge by swinging it slowly upstream and raising it. Otherwise, equipment with appropriate bucket attachments can be used. It may be less harmful to leave sediments in place rather than to dredge and remove them.</li> </ul> <p data-bbox="298 1507 444 1528"><b>Limitations</b></p> <ul data-bbox="505 1507 1349 1791" style="list-style-type: none"> <li>■ A floating sediment curtain is the last line of defense in controlling sediment. Use silt fence or straw bale barriers up to the edge of water. Silt fence can be installed in shallow water less than 1' deep, and may be adequate to replace a floating sediment curtain for some situations.</li> <li>■ Usually requires design and installation by experienced subcontractor. Floating sediment curtains are manufactured commercially and are highly recommended.</li> <li>■ Floating sediment curtains are not intended for petroleum spills, chemical spills, or other instances of floating liquids. Use an absorbent boom specifically made to capture the type of spilled liquid.</li> </ul> <p data-bbox="298 1812 444 1833"><b>References</b></p> <p data-bbox="488 1812 1008 1833">45, 115, 141 (see BMP Manual Chapter 10 for list)</p>		
Knoxville BMP Manual Erosion & Sediment	ES-27.2	May 2003

Appendix B (Continued)



**Figure ES-27-1  
Floating Sediment Curtain**

## **General Permit for Construction of Launching Ramps and Public Access Structures**

Effective Date: July 1, 2005  
Expiration Date: June 30, 2010

This general permit authorizes the construction of boat launching ramps and public access structures in waters of the state. Public access structures include, but are not limited to, fishing piers, handicap access ramps and greenway trails.

Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* and is subject to penalty in accordance with T.C.A. §69-3-115.

### **Exclusions**

This general permit shall not be used to authorize activities in the following circumstances:

- 1) where the proposed activity may adversely affect wetlands;
- 2) where a portion of the proposed activity is located in a component of the National Wild and Scenic River System, a State Scenic River, waters designated as Outstanding National Resource Waters;
- 3) where a portion of the proposed activity is located in any waterway which is identified by the department as having contaminated sediments, where the activity will likely mobilize the contaminated sediments;
- 4) when the proposed activity will adversely affect a species formally listed on either state or federal lists of threatened or endangered species or their critical habitat;
- 5) when the department determines that the proposed activities, either individually or cumulatively, may result in degradation to waters of the state; or
- 6) when an individual permit is otherwise required.

Projects not qualifying for authorization under this general permit, may be authorized by an individual permit, provided that all requirements of the *Tennessee Water Quality Control Act of 1977* are met.

### **Notification**

- 1) Notification to the division is not required where the activity is located within water resource development lands and waters, including flowage easement, managed by the Tennessee Valley Authority (TVA) or the United States Army Corps of Engineers (USCOE).
- 2) Except as provided in item 1) of this section, notification to the division is required by submission of an original, signed application (form CN-1091) along with the following minimum information:
  - (a) a cover letter explaining the scope of the project;
  - (b) a USGS topographical map showing the exact location of the proposed project; and
  - (c) a single copy of construction plans and drawings which include all dimensions and specifications for the proposed work, as well as pollution control methods and/or structures.

Except as provided in item 1) of this section, work shall not commence until the applicant has received written authorization from the division that the proposed activities may proceed under this general permit or that an individual permit has been issued.

All activities covered under this general permit, with or without notification, shall comply with all terms and conditions contained hereinafter.

### **Terms and Conditions**

- 1) The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above mentioned application and the limitations, requirements, and conditions set forth herein.
- 2) Applicant is responsible for obtaining the necessary authorization pursuant to applicable provisions of §10 of *The Rivers and Harbors Act of 1899*; §404 of *The Clean Water Act* and §26a of *The Tennessee Valley Authority Act*, as well as any other federal, state or local laws.

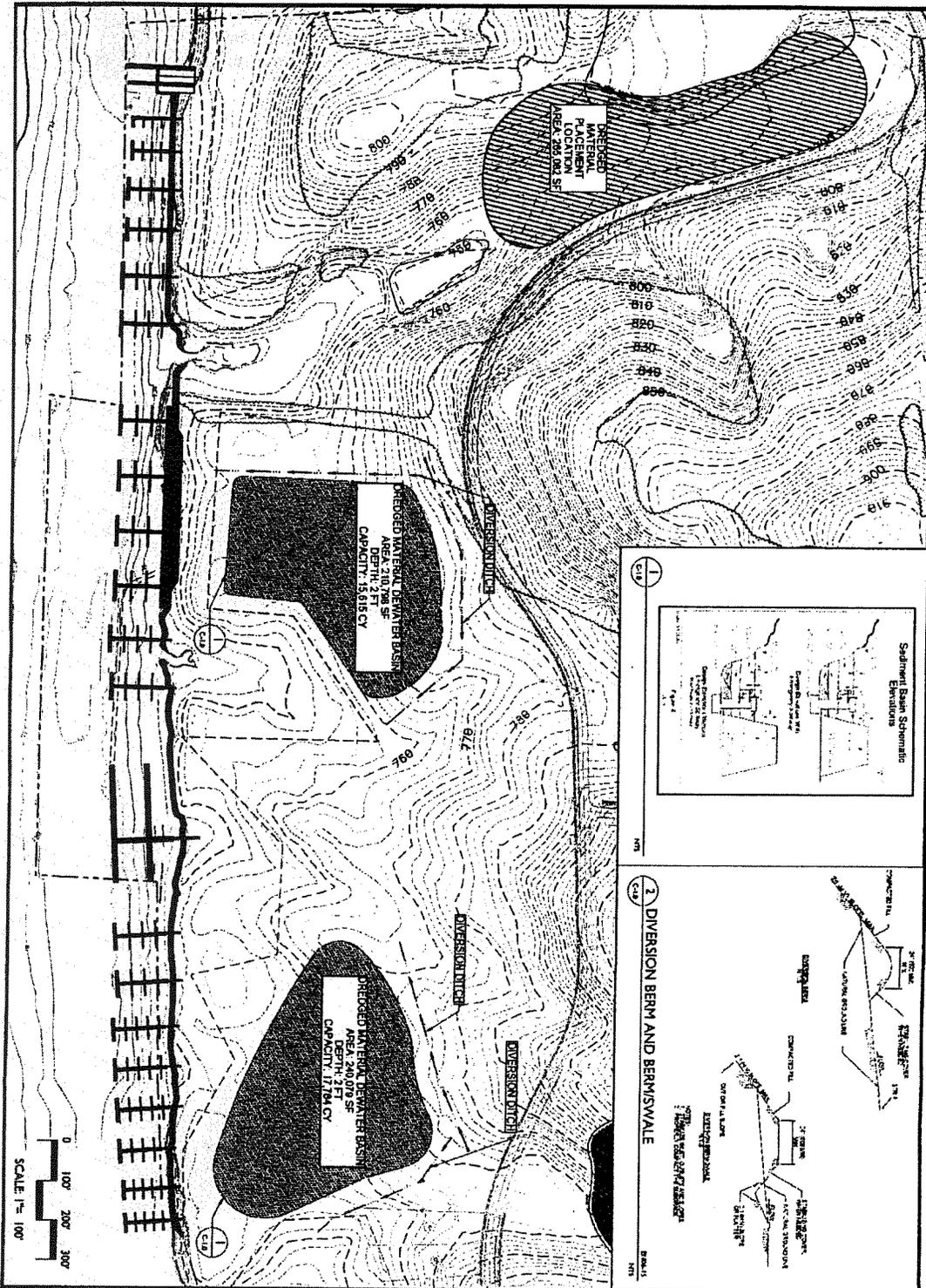
- 3) Applicant is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities for construction sites involving clearing, grading or excavation that result in an area of disturbance of one or more acres, and activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
- 4) For proposed projects that are not located within water resource development lands and waters, including flowage easement, managed by the TVA or the USCOE, the total width including base fill material, may not exceed 20 feet.
- 5) Ramps constructed on fill material shall have the side slopes stabilized with riprap.
- 6) The ramp or public access structures shall be constructed in the dry to the maximum extent practicable during winter drawdown periods of lakes/reservoirs or during low flow periods of free flowing streams.
- 7) Sediment shall be prevented from entering waters of the state. Erosion and sediment controls shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment and shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.
- 8) Erosion and sediment control measures shall be in place and functional before earth moving operations begin, and shall be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but shall be replaced at the end of the work day.
- 9) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and shall be removed when design capacity has been reduced by 50%. Discharges from sediment basins and traps shall be through a pipe or lined or well-grassed channel so that the discharge does not cause erosion.
- 10) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- 11) Clearing, grubbing and other disturbance to the riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited.
- 12) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- 13) Stabilization measures shall be initiated within seven days after the construction activity has temporarily or permanently ceased.
- 14) Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work. Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable.
- 15) Muddy water to be pumped from excavation and work areas shall be held in settling basins or filtered prior to its discharge into surface waters. Settling basins shall not be located closer than 20 feet from the top bank of the stream and water shall be discharged through a pipe, well grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.
- 16) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.
- 17) Excavated materials, removed vegetation, construction debris, and other wastes shall be removed to an upland location and properly stabilized or disposed of in such a manner as to prevent reentry into the waterway.
- 18) Materials used in construction of boat launching ramps and public access structures shall be free of contaminants, including toxic pollutants, hazardous substances, waste metal, construction debris and other wastes as defined by T.C.A. 69-3-103(18).
- 19) Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills shall be reported to the appropriate emergency management agency and to the division. In the event of a spill, measures shall be taken immediately to prevent pollution of waters of the state, including groundwater.

- 20) This general permit does not authorize impacts to cultural, historical or archaeological features or sites.
- 21) Where authorization is required, the division will establish an expiration date for coverage under this general permit that is specific to the authorization and separate from the general permit expiration date.

APPROVED: Paul E. Davis  
Paul E. Davis, Director, Water Pollution Control

DATE: 6-30-05

Appendix C



**Appendix D**  
**Site Photographs**



Community dock site; notice erosion



Matlock Island shoreline across from site



Above Matlock Island (middle right) looking downstream, site on left



From upland towards dock site and island

TENNESSEE NATIONAL, LLC  
FILE NO. 200701161  
VARIOUS DATES  
INSPECTOR: J. RUBEN HERNANDEZ

**Appendix E**  
**Public Notice Comments**



**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

December 19, 2007

Mr. J. Ruben Hernandez  
U.S. Army Corps of Engineers, Nashville District  
Regulatory Branch  
3701 Bell Road  
Nashville, Tennessee 37214

RE: COE-N, PN# 07-95/TN NATIONAL SUBDIVISION, UNINCORPORATED,  
LOUDON COUNTY, TN

Dear Mr. Hernandez:

Pursuant to your request, this office has completed an initial review of the above-referenced public notice received on Wednesday, December 19, 2007 pursuant to Section 106 of the National Historic Preservation Act. Our review is a requirement for compliance by the participating federal agency and/or applicant for federal assistance. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

We acknowledge your request that the Tennessee Valley Authority be designated the lead federal agency in this project.

We appreciate your cooperation. Questions and comments may be directed to Jennifer M. Barnett (615) 741-1588, ext. 105.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jmb

27 DEC 2007

#2007-01161  
→ JR/12

✓  
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# TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER  
P. O. BOX 40747  
NASHVILLE, TENNESSEE 37204

January 10, 2008

J. Ruben Hernandez  
Nashville District Corps of Engineers  
Regulatory Branch  
3701 Bell Road  
Nashville, TN 37214

Re: Public Notice #07-95  
Applicant: Tennessee National, LLC  
Proposed Construction of a Community Dock for the Tennessee National Residential Development and Boat Launching Ramp Involving the Excavation of Approximately 70,900 Cubic Yards of Material and the Stabilization of 2,800 Feet of Shoreline with Riprap  
Mile 583.3, left bank, Tennessee River (Watts Bar Lake)  
Loudon County, Tennessee

Dear Mr. Hernandez:

The applicant proposes to construct a community dock for the Tennessee National residential development and boat launching ramp involving the excavation of approximately 70,900 cubic yards of material and the stabilization of 2,800 feet of shoreline with riprap in Knox County.

It is the opinion of the Tennessee Wildlife Resources Agency that the applicant should be required to install and maintain a silt curtain around the footprint of area to be excavated for the duration of the construction period, when excavation is occurring, to minimize the suspension of sediment in the water column.

We thank you for the opportunity to comment on this permit application.

Sincerely,

*Robert M. Todd*

Robert M. Todd  
Fish and Wildlife Environmentalist

14 JAN 2008

**The State of Tennessee**

IS AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER

# 2007-01161

→ JRL

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1/14



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
446 Neal Street  
Cookeville, TN 38501

January 11, 2008

Lt. Colonel Bernard R. Lindstrom  
District Engineer  
U.S. Army Corps of Engineers  
3701 Bell Road  
Nashville, Tennessee 37214

Attention: Mr. J. Ruben Hernandez, Regulatory Branch

Subject: Public Notice No. 07-95. Tennessee National, LLC. Proposed Community Boat Docks, Dredging, and Riprap at Tennessee River Mile 583.3, Left Bank, Watts Bar Lake, Loudon County, Tennessee.

Dear Colonel Lindstrom:

Fish and Wildlife Service (Service) personnel have reviewed the subject public notice. The proposed project would involve the dredging of approximately 70,900 cubic yards of material along an area approximately 50 feet wide by 2,800 feet long on Watts Bar Lake, Loudon County, Tennessee. Approximately 51,200 cubic yards of material would be excavated using land-based equipment during winter pool levels. The remaining material would be dredged from a barge. The excavated material would be transported to an upland location on the applicant's (Tennessee National, LLC) property where it would be deposited and properly stabilized. The applicant also proposes to construct 20 docks in phases, as dictated by demand, which would contain a total of 127 double boat slips and 23 single slips. Also associated with the proposed project would be the construction of a concrete boat ramp and the placement of riprap along 2,800 linear feet of shoreline for bank stabilization. The purpose of the proposed project is to provide private slips to residents of the Tennessee National residential development. The following constitute the comments of the U.S. Department of the Interior, provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Endangered species collection records available to the Service do not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific

14 JAN 2008

locality. However, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the action that may affect listed species or critical habitat in a manner not previously considered, (2) the action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the action.

Our agency is concerned about the increasing number of proposals to dredge shallow-water habitats, which are also public resources, in order to accommodate private entities. Shallow water is an important nursery and forage area for most fish species. The continued loss of these shallow-water areas will eventually cause adverse impacts to the fisheries that utilize them. Therefore, if the project is permitted, we recommend that the applicant mitigate this loss by the placement of spawning benches and other enhancement techniques near, but outside of, the proposed project area. Personnel with the TWRA can provide the applicant with information regarding designs for spawning benches, spacing and number required, and other enhancement techniques.

Assuming the applicant agrees to 1) place the dredged material at an upland location outside of the 100-year floodplain and properly stabilize it to prevent re-entry into the waterway, 2) install and properly maintain throughout the dredging operation a silt boom lakeward of the excavation to reduce turbidity and sedimentation, and 3) appropriately mitigate the loss of shallow-water habitat, the Service would have no objection to the issuance of a permit for the work described in the subject public notice. However, if the applicant does not agree to the above recommendations, we recommend that the subject permit be denied.

Thank you for this opportunity to review the subject notice. Please contact Robbie Sykes of my staff at 931/528-6481 (ext. 209) if you have questions about these comments.

Sincerely,



Lee A. Barclay, Ph.D.  
Field Supervisor

xc: Robert Todd, TWRA, Nashville, TN  
Dan Eagar, TDEC, Nashville, TN  
Anthony Summitt, Lenoir City, TN  
Darryl Williams, EPA, Atlanta, GA

**Appendix F**  
**Applicant's Rebuttal**

**BDY**  
ENVIRONMENTAL CONSULTANTS

February 1, 2008

Mr. Ruben Hernandez  
US Army Corps of Engineers  
Regulatory Branch  
3701 Bell Road  
Nashville, Tennessee 37214

Re: Tennessee National (File No. 200701161)  
Response to Public Comments Received for Public Notice 07-95

Dear Mr. Hernandez:

On behalf of Tennessee National, LLC, BDY Environmental, LLC (BDY) has prepared this letter that includes the responses of our client pertaining to specific comments received during the public comment period and summarized in your letter dated January 17, 2008. Based on our review of the letter, there were three specific comments submitted by the US Fish & Wildlife Service (USFWS) and the Tennessee Wildlife Resources Agency (TWRA). The comments are listed below followed by our responses:

- 1) **Comment:** USFWS requests that spawning benches and/or other aquatic habitat enhancement techniques be built near, but outside of, the proposed project area.

**Response:** At the recommendation of USFWS, we have contacted Mr. Robert M. Todd of TWRA to discuss their suggested mitigation for the dredging that is proposed for the shallow-water habitats. He informed us that they generally require roughly 32 spawning benches per acre of disturbance. Mr. Todd also informed us that we should work with Mr. Doug Peterson from their Region 4 offices to determine suitable quantities and locations for the placement of these benches and/or other acceptable habitat enhancements that could be performed near the proposed project area.

Tennessee National will work with both TWRA and USFWS to ensure that mitigation for proposed impacts to shallow water habitats is completed and is satisfactory to offset any impacts.

- 2) **Comment:** Would you be able to remove the majority of the dredged/excavated material above the 100-year floodplain?

**Response:** Tennessee National, LLC will ensure that all dredged/excavated material will be removed and stockpiled above the 100-year floodplain. They will work with US

**BDY**  
ENVIRONMENTAL CONSULTANTS

Army Corps of Engineers (ACOE) and project engineers to ensure that this is accomplished.

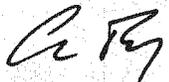
- 3) **Comment:** Would you be able to install a silt boom around the dredge area to reduce turbidity and sedimentation?

**Response:** Tennessee National, LLC will ensure that a silt boom will be installed around the dredge area in addition to utilizing suitable sediment and erosion BMPs during all phases of marina construction. These actions will be done to minimize the potential for high turbidity and sedimentation associated with proposed dredging and construction activities.

We understand that the permit can not be issued for the proposed activities until you are provided with a water quality certification from the Tennessee Division of Water Pollution Control. The application for this certification has been submitted as an Aquatic Resources Alteration Permit (ARAP) application to the Tennessee Department of Environment and Conservation (TDEC). The public notice period for this permit began on January 8, 2008 and we expect to receive comments received pertaining to that public notice shortly after the 30-day notice window expires.

If you have any additional questions or comments, feel free to contact me at (615) 460-9797.

Best regards,



Chris A. Fleming  
Senior Project Scientist

Cc:

Mr. Chad Hulette, Tennessee National

**Appendix G**  
**Memorandum of Agreement**

**MEMORANDUM OF AGREEMENT  
BETWEEN THE TENNESSEE VALLEY AUTHORITY AND THE TENNESSEE STATE  
HISTORIC PRESERVATION OFFICER  
PURSUANT TO 36 CFR PART 800**

WHEREAS, the Tennessee Valley Authority (TVA) proposes to issue a permit under Section 26a of the *TVA Act*, and the United States Army Corps of Engineers (USACE) proposes to issue a permit under Section 10 of the *Rivers and Harbors Act* and Section 404 of the *Clean Water Act* to Tennessee National, LLC (TNN), for a marina and associated amenities in the Tennessee National: Waterfront Golf Community; and,

WHEREAS, TVA and USACE have consulted and have designated TVA as the lead Section 106 compliance Agency for this project (Appendix A); and,

WHEREAS, TVA, in consultation with the Tennessee State Historic Preservation Officer (TNSHPO), has determined that the area of potential effects (APE) for this undertaking is the Tennessee National: Waterfront Golf Community (Appendix A); and,

WHEREAS, archaeological and historic structure resources identification and evaluation have been conducted within the APE, as referenced in Appendix B; and TVA and TNSHPO agree that archaeological sites 40LD187, 40LD191, 40LD220, and 40LD221 that are located within the boundary of the APE are eligible for listing in the National Register of Historic Places (NRHP); and,

WHEREAS, TVA, in consultation with TNSHPO, has determined that the undertaking will adversely affect archaeological sites 40LD187, 40LD191, and 40LD221 (Appendix A); and,

WHEREAS, TVA, in consultation with TNSHPO, has determined that the undertaking will not adversely affect historic structures listed in, or eligible for, NRHP; and,

WHEREAS, TVA has consulted with TNN, USACE, TNSHPO, Eastern Band of Cherokee Indians, Cherokee Nation, United Keetoowah Band of Cherokee Indians in Oklahoma, The Chickasaw Nation, Muscogee (Creek) Nation of Oklahoma, Kialegee Tribal Town, Thlopthlocco Tribal Town, Alabama-Quassarte Tribal Town, Alabama-Coushatta Tribe of Texas, Shawnee Tribe, Absentee Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Seminole Tribe of Florida, Choctaw Nation of Oklahoma, and Jena Band of Choctaw Indians (Appendix A); and,

WHEREAS, there is no evidence, to date, that human remains, associated or unassociated funerary objects, sacred objects, or objects of cultural patrimony (collectively termed cultural items) are present at the designated sites; and,

WHEREAS, the possibility exists that cultural items could be discovered during mitigation and construction activities; and,

WHEREAS, a Treatment Plan has been developed and is made a part of this Agreement as Appendix C, Treatment Plan.

NOW THEREFORE, TVA, and TNSHPO agree that the undertaking shall be implemented in accordance with the following stipulations to satisfy TVA's Section 106 responsibilities. The TVA Federal Preservation Officer, or the designee thereof, shall act for TVA in all matters concerning the administration of this Agreement.

## **STIPULATIONS**

TVA shall ensure that the following stipulations are carried out before the commencement of any ground-disturbing activities. TNN shall be responsible for all costs necessary for implementation of this Agreement.

### **1. TREATMENT**

The Treatment Plan, attached as Appendix C, has been developed in consultation with the signatories and concurring parties. Such Treatment Plan includes data recovery and/or avoidance of 40LD187, 40LD191, 40LD220, and 40LD221.

### **2. SPECIAL CONSTRUCTION CONSIDERATIONS**

To allow for certain construction activities within the boundary of 40LD187 and 40LD191, special construction considerations will be agreed upon by the signatories, invited signatories, and concurring parties. A temporary barrier or fence will be installed around the intact archaeological resources of sites 40LD187 and 40LD191 to avoid allowing any construction equipment within intact archaeological resources of the site(s) where data recovery has not been conducted.

### **3. REPORTS**

TVA shall ensure that all investigations undertaken for compliance with this Agreement are recorded in formal written reports that meet the Secretary of Interior's Standards and Guidelines for Identification (48 FR 44720-23) and TNSHPO Standards and Guidelines for Architectural and Archaeological Resource Management Studies. The signatories and concurring parties shall be afforded thirty (30) days to review and comment on any reports submitted as compliance with this Agreement.

### **4. TREATMENT OF HUMAN REMAINS AND FUNERARY OBJECTS**

TNN, in consultation with TVA, TNSHPO, USACE, and Indian tribes that attach religious and cultural significance to NRHP-eligible properties (concerned Indian tribes), shall ensure that the treatment of any human remains and associated funerary objects discovered within the project area, complies with all applicable state and federal laws. Should human remains be encountered during historic properties investigations or post-review discovery, all ground-disturbing activities within 50 feet of the discovery will be ceased immediately. The remains will be treated with respect to the deceased, and shall be protected, from the time of discovery, from further construction activities pending consultation to resolve treatment of such remains.

## TENNESSEE NATIONAL, LLC, MOA

TNN shall immediately notify the Loudon County Coroner, the State Archaeologist, TVA, and USACE should any human remains and/or associated funerary objects be encountered in connection with any activity covered by this Agreement. TVA will promptly inform TNSHPO upon being notified of the discovery. TVA will also notify concerned Indian tribes within forty-eight (48) hours of being informed of the presence of Native American human remains and/or funerary objects, and invite signatories and these Indian tribes to comment on any plans developed to treat these remains and/or funerary objects. Whenever and wherever it is feasible, human remains will be preserved in-place. TNN, in consultation with TVA, USACE, TNSHPO, and concerned Indian tribes shall ensure that those remains and artifacts are treated in a manner that is consistent with the Advisory Council of Historic Preservation's (ACHP) "Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects" (2007); referenced in Appendix D. Further, this treatment will be conducted in accordance with the applicable provisions of Tennessee Code Annotated (T.C.A.) 46-4-101 et seq. ("Termination of Use of Land as a Cemetery,"); T.C.A. 11-6-116, ("Excavation of Areas Containing Native American Indian Remains,"); T.C.A. 11-6-119 ("Reburial of Human Remains or Native American Burial Objects following Discovery or Confiscation") and Tennessee Rules and Regulations, Chapter 0400-9-1 ("Native American Indian Cemetery Removal and Reburial"); and the policies of the culturally affiliated Indian tribes regarding the treatment of human remains and funerary objects as referenced in Appendix D, if such human remains are of Native American origin and cultural affiliation can be determined.

### **5. TIMETABLE FOR COMPLIANCE**

- a. TVA and TNN shall ensure that Stipulations 1-4 of this Agreement are met before commencement of any ground-disturbing activities within intact archaeological resources at 40LD187, 40LD191 and 40LD221. If Tennessee National: Waterfront Golf Community is to be completed in a phased construction, the stipulations of this Agreement may be satisfied independently for each phase.
- b. Throughout this Agreement, unless otherwise stated, the signatories, invited signatories, and concurring parties shall have thirty (30) days to review and comment on all reports concerning investigations of historic properties. Comments received from the signatories, invited signatories, and concurring parties shall be taken into consideration by TVA in preparing final plans. TVA will supply copies of the final reports and data recovery plans to the signatories, invited signatories, and concurring parties.

### **6. ADMINISTRATIVE CONDITIONS**

- a. If Stipulations 1 to 5 has not been implemented within four (4) years from the date of this Agreement's execution, this Agreement shall be considered null and void, unless the signatories and invited signatories have agreed in writing, as provided in Paragraph 6.b. below, to an extension for carrying out its terms. Upon the Agreement's becoming null and void, the signatories, invited signatories and concurring parties will resume consultation pursuant to 36 CFR Part 800.

- b. If the implementation of Stipulations 1 to 5 has not commenced within four (4) years from the date of this Agreement's execution, the signatories and invited signatories shall review the Agreement to determine whether the Agreement should be extended. If an extension is deemed necessary by TVA, the signatories, invited signatories and concurring parties will consult in accordance with 36 CFR Part 800.6(c) to make appropriate revisions to the Agreement.
- c. The signatories, invited signatories, or concurring parties, may request that this Agreement be amended, whereupon these parties will consult in accordance with 36 CFR Part 800.14(b), to consider such amendment, and if TVA concurs, the amendment shall be appended to the Agreement as an attachment.
- d. If at any time during implementation of this Agreement, the signatories, invited signatories, or concurring parties object to any action or any failure to act pursuant to this Agreement, they may file written objections with TVA.
  - 1. TVA will consult with the objecting party, and with other parties, or consulting party, as appropriate, to resolve the objection.
  - 2. TVA may initiate on its own such consultation to remove any of its objections.

If TVA determines that the objection cannot be resolved, TVA will forward all documentation relevant to the dispute to the Agreement and request that the ACHP comment. Within thirty (30) days after receiving all pertinent documentation, the ACHP will either:

- 1. Provide TVA with recommendations, which TVA will take into account in reaching a final decision regarding the dispute; or
- 2. Notify TVA that it will comment pursuant to 36 CFR section 800.7(c)(I) through (3) and section 110(1) of the *National Historic Preservation Act*, and proceed to comment.

TVA will take into account any ACHP comment, provided in response to such a request, with reference to the subject of the dispute, and will issue a decision on the matter. TVA's responsibility to carry out all actions under this Agreement that, is not the subject of dispute, will remain unchanged.

- e. The signatories and invited signatories may terminate this Agreement by providing thirty (30) days written notice to the other parties, provided that signatories, invited signatories, and concurring parties consult during the 30-day notice period in order to seek agreement on amendments or other actions that would avoid termination. In the event of termination, TVA will comply with 36 CFR sections 800.3 through 800.6, with regard to individual actions covered by this Agreement until such time that TVA may enter into a new Agreement with the signatories or request the comments of the ACHP pursuant to 36 CFR Part 800.7(a).

Execution of this Agreement by TVA, TNSHPO, USACE, and TNN, and implementation of its terms evidence that TVA has taken into account the effects of the Tennessee National: Waterfront Golf Community on historic properties and that TVA has complied with its obligations under Section 106 of the *National Historic Preservation Act*.

**SIGNATORY**

TENNESSEE VALLEY AUTHORITY

By: Bridgette Ellis

Date: 3-11-08

Bridgette K. Ellis, Senior Vice President, Office of Environment and Research and  
Federal Preservation Officer

TENNESSEE NATIONAL, LLC, MOA

**SIGNATORY**

THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER

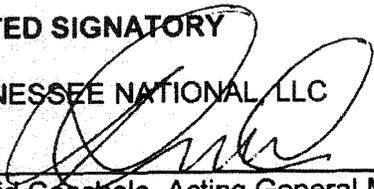
By: E. Patrick McIntyre, Jr.  
E. Patrick McIntyre, Jr., State Historic Preservation Officer

Date: 3-25-08

TENNESSEE NATIONAL LLC, MOA

INVITED SIGNATORY

TENNESSEE NATIONAL LLC

By:   
[ David Cecchele, Acting General Manager ]

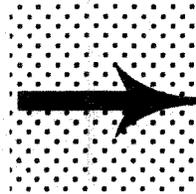
Date: 3/20/08

**INVITED SIGNATORY**

UNITED STATES ARMY CORPS OF ENGINEERS

By:  \_\_\_\_\_  
Lieutenant Colonel Bernard R. Lindstrom, District Engineer

Date: 7 APR 08



TENNESSEE NATIONAL, LLC, MOA

**CONCURRING PARTY**

UNITED KEETOOWAH BAND OF CHEROKEE INDIANS IN OKLAHOMA

By: \_\_\_\_\_  
George G. Wickcliffe, Chief

Date: \_\_\_\_\_

TENNESSEE NATIONAL, LLC, MOA

**CONCURRING PARTY**

EASTERN BAND OF CHEROKEE INDIANS

By: \_\_\_\_\_  
Michell Hicks, Principal Chief

Date: \_\_\_\_\_

TENNESSEE NATIONAL, LLC, MOA

**CONCURRING PARTY**

SEMINOLE TRIBE OF FLORIDA

By: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 2**

**404(b)(1) Guidelines Compliance Checklist**

Evaluation of compliance with 404(b)(1) Guidelines (Restrictions on Discharge, 40 CFR 230.10):  
(A check in a block denoted by an asterisk indicates that the proposal does not comply with the guidelines.)

• Alternatives test.

Based on the discussions in Section 4, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "WUS" or at other locations within these waters?  
[Yes(\*)\_\_ No x]

Based on the discussions in Section 4, if the project is in a special aquatic site and is not water-dependent, has applicant clearly demonstrated that there are no practicable alternative sites available?  
[Yes x No(\*)\_\_]

• Special restrictions. Will the discharge:

- violate state water quality standards? [Yes(\*)\_\_ No x]

- violate toxic effluent standards (under Section 307 of the Act)? [Yes(\*)\_\_ No x]

- jeopardize endangered or threatened species or their critical habitat? [Yes(\*)\_\_ No x]

- violate standards set by the Department of Commerce to protect marine sanctuaries?  
[Yes(\*)\_\_ No x]

Evaluation of the physical/chemical and biological characteristics and anticipated changes indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s):  
[Yes x No \_\_]

(x) based on available information, the material is not a carrier of contaminants

( ) the levels of contaminants are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas

( ) acceptable constraints are available and will be implemented to reduce contamination to acceptable levels within the disposal site and prevent contaminants from being transported beyond the boundaries of the disposal site

• Other restrictions. Will the discharge contribute to significant degradation of "WUS" through adverse impacts to:

- human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife, and special aquatic sites? [Yes(\*)\_\_ No x]

- life stages of aquatic life and other wildlife? [Yes(\*)\_\_ No x]

- diversity, productivity, and stability of the aquatic ecosystem, such as loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water, or reduce wave energy?  
[Yes(\*)\_\_ No x]

- recreational, aesthetic and economic values? [Yes(\*)\_\_ No x]

● Actions to minimize potential adverse impacts (mitigation). Will all appropriate and practicable steps (40 CFR 230.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?  
[Yes x No(\*)\_\_]

The mitigation measures included in the permit application, additional mitigation, general permit conditions, and special permit conditions developed would adequately minimize adverse effects to the aquatic environment.