Tennessee Valley Authority
Post Office Box 2000
Soddy Daisy, Tennessee 37384-2000

Timothy P. Cleary
Site Vice President
Sequoyah Nuclear Plant

April 14, 2009

Department of the Army Offices
U.S. Army Corps of Engineers
Eastern Regulatory Field Office
501 Adesa Blvd, Suite 250
Lenoir City, Tennessee 37771

Dear U.S. Army Corps of Engineers,

TENNESSEE VALLEY AUTHORITY (TVA) – SEQUOYAH NUCLEAR PLANT (SQN) – JOINT APPLICATION FORM DEPARTMENT OF ARMY/TVA – CONDENSER CIRCULATING WATER (CCW) INTAKE CHANNEL BANK STABILIZATION

Enclosed are a Joint Application Form Department of the Army/TVA, a site map (Figure 1), a contour map of the CCW Intake Channel (Figure 2), photos of the bank erosion (Figures 3 and 4), CCW Intake Channel bank erosion remediation drawing (Figure 5), a shoreline rock riprap drawing (Figure 6), and a Snow Hill 7.5 minute quadrangle (Figure 7). These enclosed maps and drawings are of the bank stabilization work to be performed at the Sequoyah Nuclear Plant in Hamilton County, Tennessee.

The bank stabilization consists of the removal of undercut trees along the south bank of the CCW intake channel (this area is located inside the skimmer wall of the Sequoyah Nuclear Plant and not on the Tennessee River shoreline), with minimal reshaping and excavation to improve the bank slope. Cleared trees and brush will be chipped into mulch and placed in a spoils area onsite above the 500 year floodplain. Other debris such as dirt, sand, and rock will be spread onsite also above the 500 year floodplain. The bank will then be stabilized with approximately 12-24 inches of 6-12 inch rip-rap. Sand or crusher run may be used as fill material as necessary. The approximate linear length of the bank to be reshaped and stabilized is 450 feet, located inside the skimmer wall area at approximately Tennessee River mile (TRM) 484.7. Approximately 70 cubic yards

D030
NRR

of rip-rap will be placed below the normal summer water elevation of 682.5. The area in which rip-rap will be applied above the water level will vary as the ground slope varies along the shoreline. Appropriate Best Management Practices (BMPs) will be employed throughout the duration of this project and no significant adverse environmental impacts are anticipated. It is preferable that as much of the work as possible be performed before the Tennessee River reaches its normal summer water elevation; therefore, TVA requests expedited approval so that the work can proceed.

If you have any questions or need additional information, please contact Ann Hurt at (423) 843-6714 or Stephanie Howard at (423) 843-6700 of Sequoyah's Environmental staff.

Sincerely,

Timothy P. Cleary
Site Vice President
Sequoyah Nuclear Plant

Enclosures
cc (Enclosures):

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

J. Scott Lea
TVA Office (Chickamauga, Nickajack)
1101 Market Street, PSC 1E-C
Chattanooga, TN 37402-2801

OMB No. 3316-0060

JOINT APPLICATION FORM
Department of the Army/TVA

Paperwork Reduction Act Statement - Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Agency Clearance Officer, Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402; and to the Office of Management and Budget, Paperwork Reduction Project (3316-0060), Washington, D.C. 20503.

The Department of the Army (DA) permit program is authorized by **Section 10 of the Rivers and Harbors Act of 1899** and **Section 404 of the Clean Water Act (P.L. 95-217).** These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. **Section 26a of the Tennessee Valley Authority Act,** as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

Name and Address of Applicant:	Name, Address, and Title of Authorized Agent:
Timothy P. Cleary, TVA Sequoyah Nuclear Plant Site Vice President TVA Sequoyah Nuclear Plant, Sequoyah Access Road P.O. Box 2000, Mail Stop: OPS-4A-SQN Soddy-Daisy, Tennessee 37379	Same as Applicant
Telephone Number: Home Office (423) 843-7001	Telephone Number: Home Office

Location where activity exists or will occur *(include Stream Name and Mile, if known):*

Sequoyah Nuclear Plant Intake Forebay CCW Channel, Tennessee River (Hamilton County, Tennessee)

Application submitted to ☑ DA ☐ TVA

Date activity is proposed to commence: 05/04/2009 Date activity is proposed to be completed: 08/28/2009

Describe in detail the proposed activity, its purpose and intended use *(private, public, commercial, or other).* Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.

The repair consists of the removal of undercut trees along the south bank of the intake channel, with minimal reshaping and excavation to improve the bank slope. The bank will then be stabilized with approximately 12-24 inches of 6 - 12 inch rip-rap. Sand or crushed stone may be used as fill material as necessary. The approximate linear length of the bank to be reshaped and stabilized is 450 feet. Approximately 70 cubic yards of stone will be placed below the normal high water elevation. The area in which rip-rap will be applied above the water level will vary as the ground slope varies. Remove undercut trees along the bank of the CCW Intake Channel. Trees and other debris that may eventually release from the bank into the intake channel present possible plant operability issues. Also, the bank is to be reshaped in order to apply rip-rap to add stability and prevent further erosion.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. **I agree that, if this application is approved by TVA, I will comply with the attached terms and conditions and any special conditions that may be imposed by TVA at the time of approval. Please note the U.S. Army Corps of Engineers may impose additional conditions or restrictions.**

14APR09
Date

Timothy P. Cleary
Signature of Applicant

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years, or both. The appropriate DA fee will be assessed when a permit is issued.

Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose properties also join the waterway:

Tennessee Valley Authority (TVA) - Sequoyah Nuclear Plant

List of previous DA/TVA permits/approvals ☐ DA _____ (Permit Number) ☐ TVA _____ (Date)

Is any portion of the activity for which authorization is sought now complete? ☐ Yes ☑ No *(If "Yes" attach explanation)*

Month and year the activity was completed: _____ . Indicate the existing work on the drawings.

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?

☐ Yes ☑ No *(If "Yes" attach explanation)*

Privacy Act Statement

This information is being requested in accordance with Section 26a of the TVA Act as cited on the front page of this form. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your being denied a Section 26a permit. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or Section 26a program; and for oversight or similar purposes, corrective action, litigation or law enforcement.

Project plans or drawings should accompany the application. These should be on paper suitable for reproduction no larger than 11 x 17 inches or contained on a 3-1/2 inch floppy computer disc in "dxf" format, and should be submitted to the appropriate TVA and U.S. Army Corps of Engineers offices. An application that is not complete will be returned for additional information

Department of the Army Offices

U.S.Army Engineer District, Nashville
Corps of Engineers
Attention: Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37214
Phone: (615) 369-7500

U.S. Army Corps of Engineers
Eastern Regulatory Field Office
501 Adesa Blvd, Suite 250
Lenoir City, TN 37771
Phone: (865) 986-7296

U.S. Army Corps of Engineers
Western Regulatory Field Office
2042 Beltline Road, SW
Bldg. C, Suite 415
Decatur, AL 35601
Phone: (256) 350-5620

TVA Office Locations

(Boone Dam Vicinity)
106 Tri-Cities BusinessPark Drive
Gray, TN 37615

(Cherokee, Douglas, Nolichucky)
3726 E. Morris Blvd
Morristown, TN 37813

(Watts Bar, Melton Hill, Norris)
Watts Bar-Clinch Watershed Team
260 Interchange Park Dr
Lenoir City, TN 37772

(Ft. Loudoun, Tellico)
Little Tennessee Watershed Team
260 Interchange Park Dr.
Lenoir City, TN 37772

(Ocoee 1,2,3)
221 Old Ranger Road
Murphy, NC 28906

(Chickamauga, Nickajack)
1101 Market Street, PSC 1E-C
Chattanooga, TN 37402-2801

(Guntersville, Tims Ford
Normandy)
3696 Alabama Hwy 69
Guntersville, AL 359

(Pickwick, Wheeler, Wilson
Bear Creek)
P.O. Box 1010
Muscle Shoals, AL 35662

(Kentucky)
2835-A East Wood Street
Paris, TN 38242

Figure 1: Sequoyah Nuclear Plant

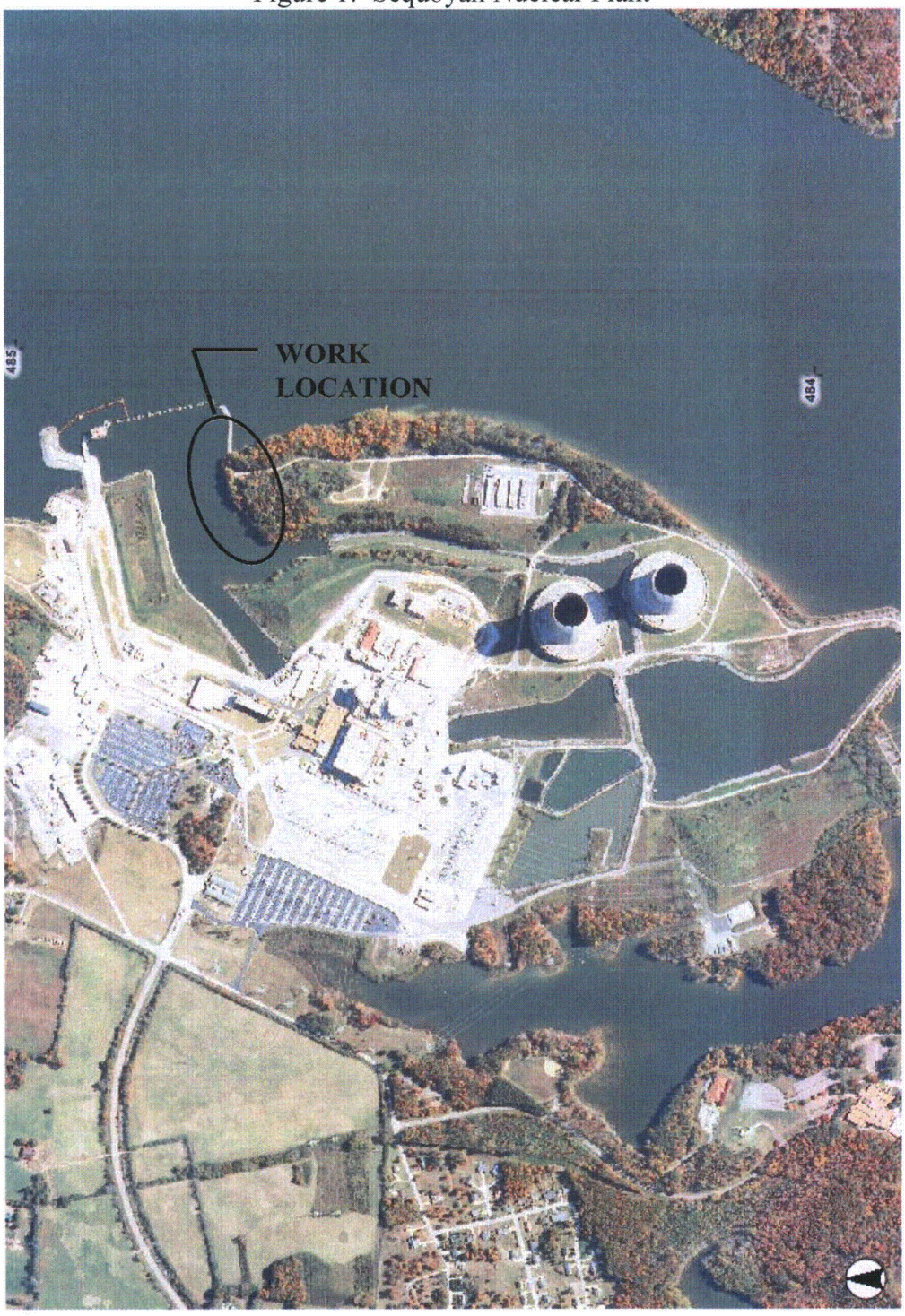


Figure 2: Intake Channel Topography - 2' Contours

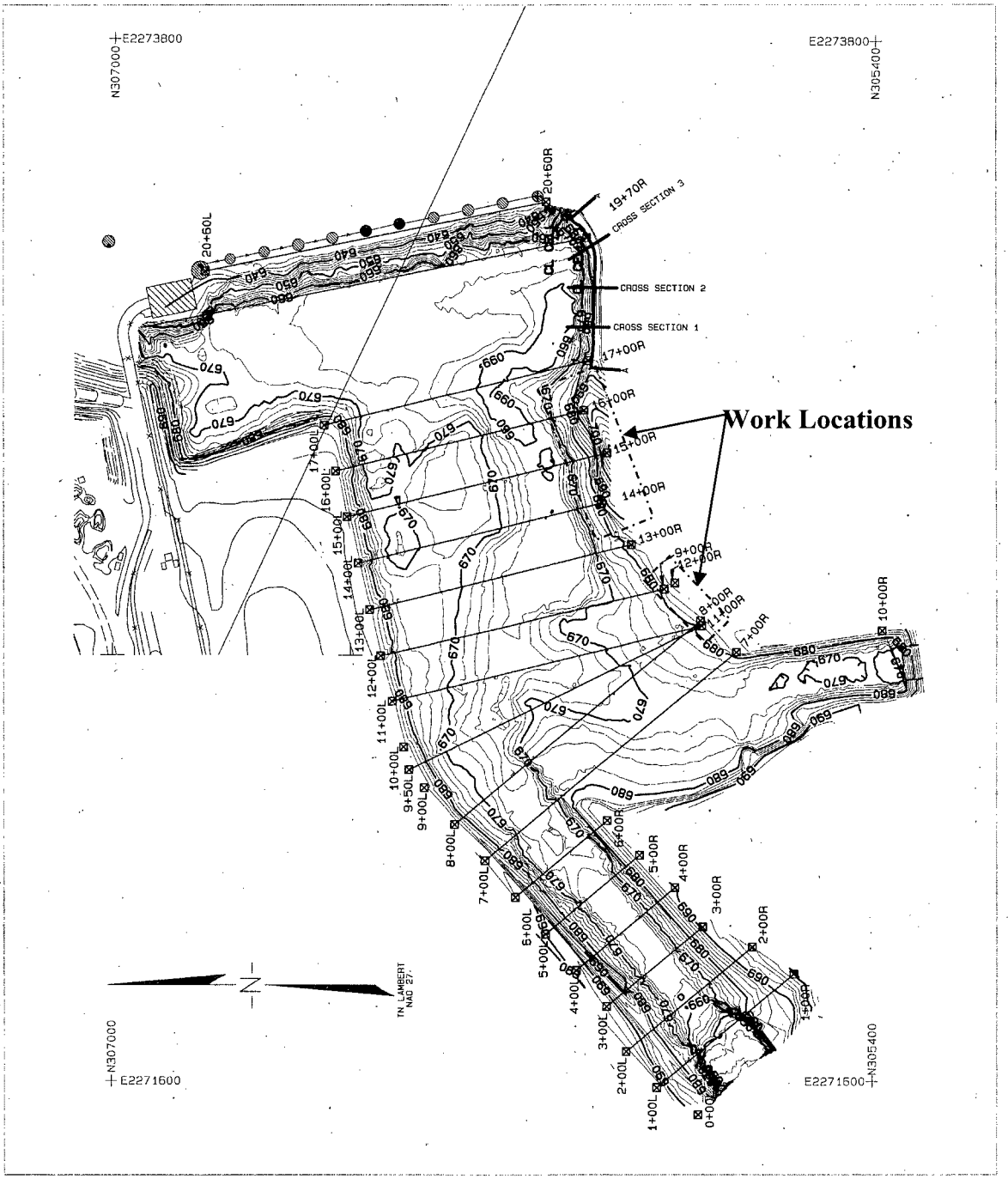


Figure 3: Slope Remediation and Placement of Rip-Rap

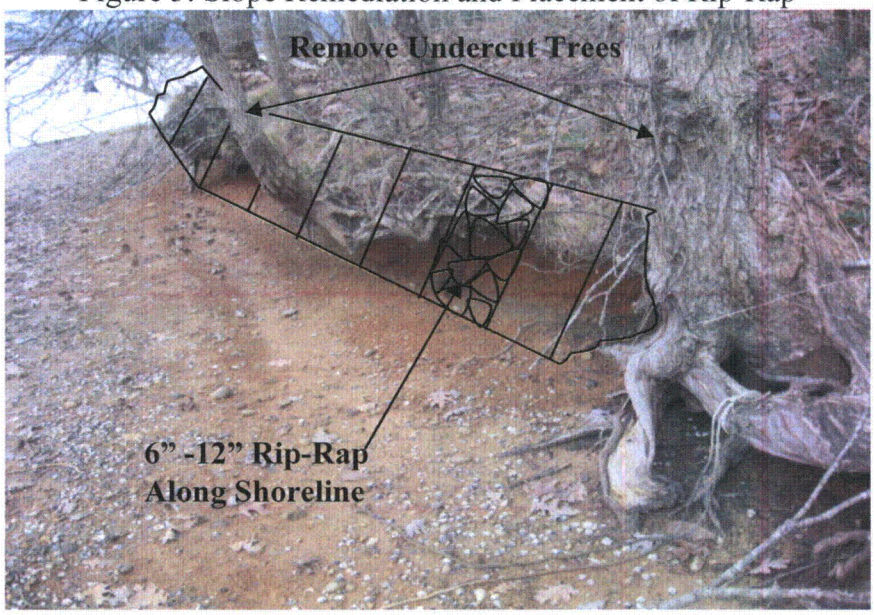


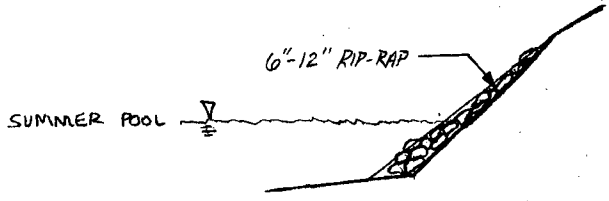
Figure 4: Example of Undercut Trees

SEQUOYAH NUCLEAR PROJECT	SHEET OF	FIGURE 5
CALCULATION SHEET	CALC. I.D.	
	Prepared by JHJ TRH Date 3-28-09	
	Checked by Date	

SUBJECT: CCW INTAKE CHANNEL BANK EROSION REMEDIATION

REFERENCES

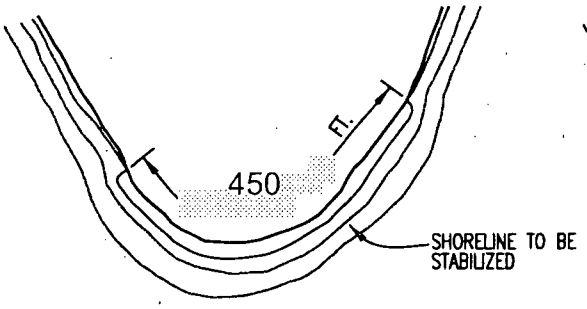
EXAMPLE
EXISTING BANK PROFILE



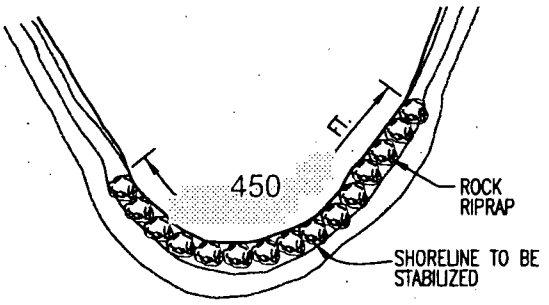
PROPOSED BANK PROFILE

FIGURE 6

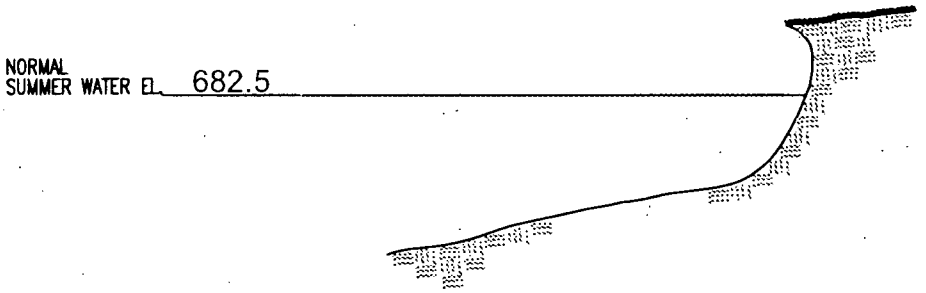
NOTE: INCLUDE ALL DIMENSIONS AND ELEVATIONS WHERE INDICATED



PLAN SHOWING EXISTING SHORELINE



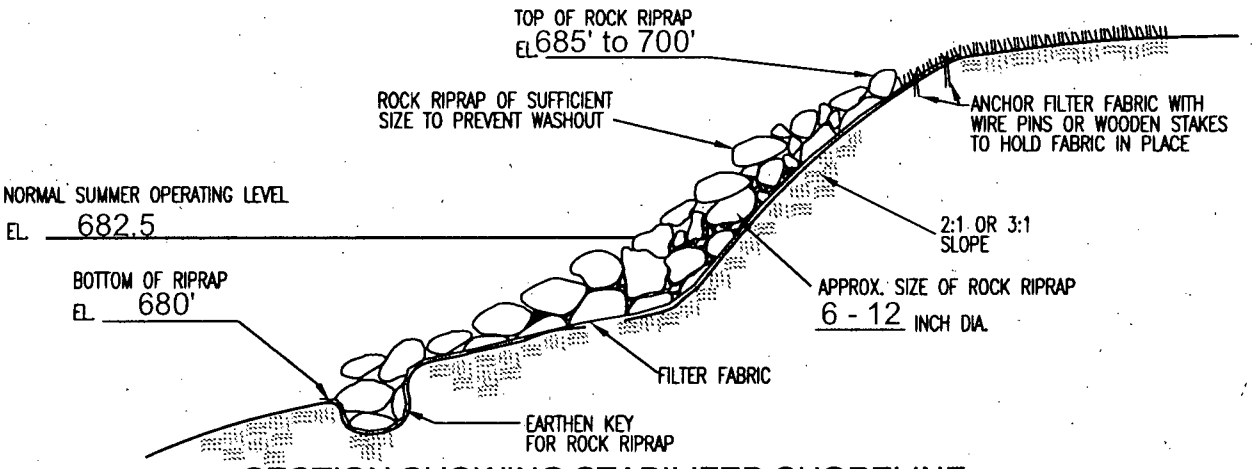
PLAN SHOWING STABILIZED SHORELINE



SECTION SHOWING EXISTING SHORELINE

CUBIC YARDS OF FILL

70 cubic yards RipRap



SECTION SHOWING STABILIZED SHORELINE

TVA

SHORELINE ROCK RIPRAP

PROJECT LOCATION INFORMATION:

APPLICANT Timothy P. Cleary

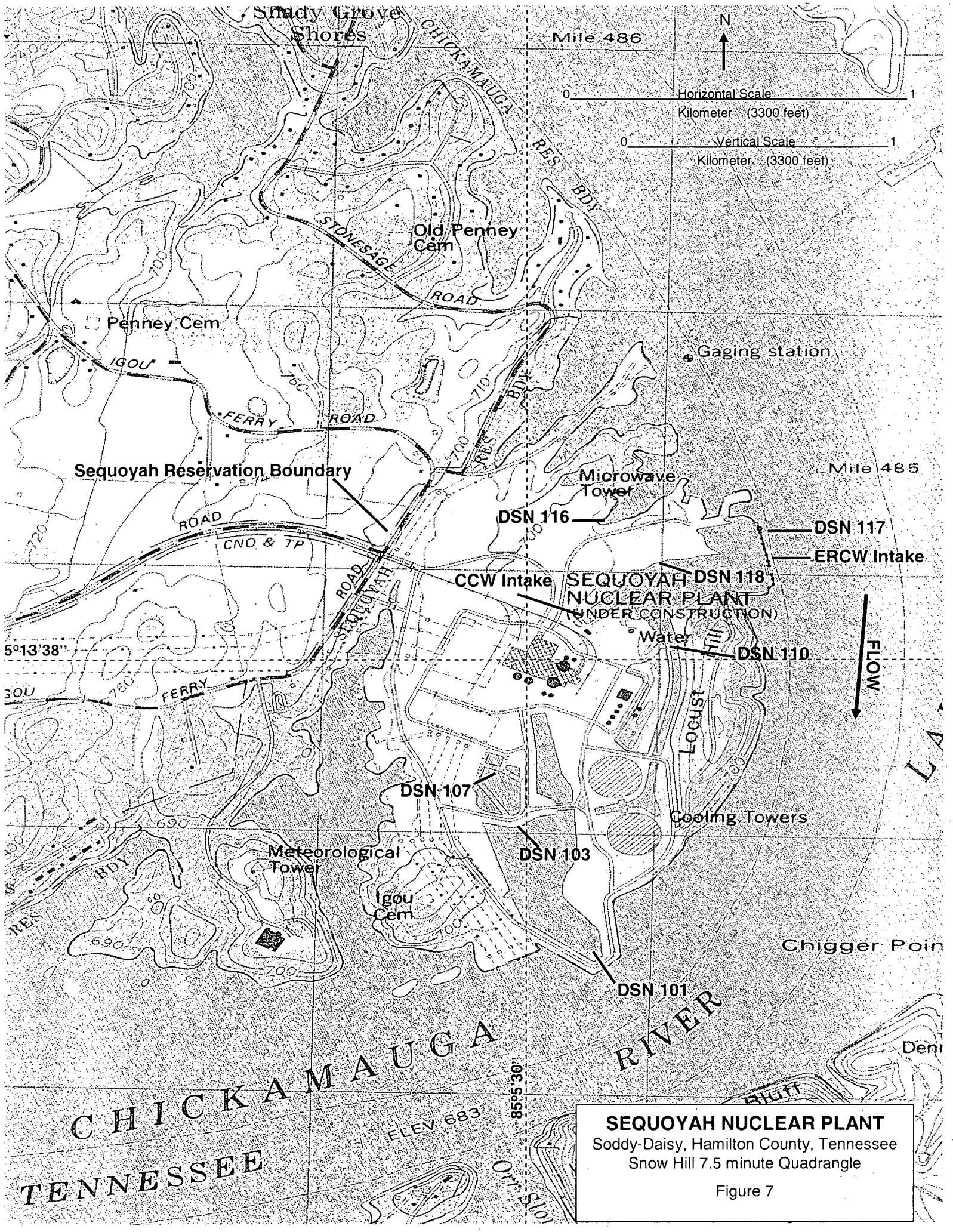
RESERVOIR Chickamauga

TRACT NUMBER

SUBDIVISION

LOT NO. MAP NO.

RIVER Tennessee RIVER MILE approx. TRM 484.7



SEQUOYAH NUCLEAR PLANT

Soddy-Daisy, Hamilton County, Tennessee
Snow Hill 7.5 minute Quadrangle

Figure 7