STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
NATURAL RESOURCES SECTION
401 CHURCH STREET, 7TH FLOOR L & C ANNEX
NASHVILLE, TENNESSEE 37243-1534

January 5, 2011

Mr. Doug Ward
Belle Meade Country Club
815 Belle Meade Blvd.
Nashville, TN 37205

Subject: **General Permit for Bank Stabilization**
Aquatic Resource Alteration Permit (ARAP) NRS11.001
Belle Meade Country Club
Davidson County, Tennessee

Dear Mr. Ward:

We have reviewed your application for the proposed grading 180 linear feet of streambank and stabilization with sod. This activity is governed by the *General Permit for Bank Stabilization*. The work must be accomplished in conformance with accepted plans and information submitted in support of application NRS11.001 and the limitations and conditions set forth in the *General Permit for Bank Stabilization* (enclosed). It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understand the permit conditions before the project begins.

Please note, adequate erosion controls must be installed prior to construction and maintained during construction of the project. All disturbed areas must be revegetated or otherwise stabilized upon completion of construction. Please make the necessary provisions for these circumstances.

We appreciate your attention to the Aquatic Resource Alteration Permit program. If you have any questions, please contact Mr. Benjamin Brown at (615) 532-0709 or by e-mail at *Benjamin.Brown@tn.gov*.

Sincerely,

Robert D. Baker
Assistant Manager, Natural Resources Section

Encl: NOC and copy of general permit
CC: DWPC, Nashville Environmental Field Office
U.S. Army Corps of Engineers, Nashville Regulatory Office
File copy

STATE OF TENNESSEE

NOTICE OF COVERAGE

Under the Aquatic Resource Alteration

General Permit for Bank Stabilization

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street, 6th Floor, L&C Annex
Nashville, Tennessee 37243-1534

ARAP - NRS11.001

Under authority of the Tennessee Water Quality Control Act of 1977 (TWQCA, T.C.A. 69-3-101 et seq.) the Division of Water Pollution Control has determined the activity described below would not violate applicable water quality standards.

This activity is governed by the *General Permit for Bank Stabilization* (effective July 1, 2010) issued pursuant to the TWQCA. The work must be accomplished in conformance with accepted plans, specifications, data and other information submitted in support of application NRS11.001 and the terms and conditions set forth in the above referenced general permit.

PERMITTEE:	Belle Meade Golf Course
AUTHORIZED WORK:	Grading 180 linear feet of streambank and stabilization with sod
LOCATION:	Bank Stabilization along Richard Creek, Davidson County Coordinates: 36.0997, -86.8676
WATERBODY NAME:	Richland Creek

EFFECTIVE DATE: 05-JAN-11 **EXPIRATION DATE**: 05-JAN-12

This does not preclude requirements of other federal, state or local laws. In particular, 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. 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 authorization or seek modification or revocation should the state determine that the activity results in more than an insignificant violation of applicable water quality standards or violation of the TWQCA. Failure to comply with permit terms may result in penalty in accordance with T.C.A. §69-3-115.

Paul E. Davis

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

RDA 2971

Tennessee Department of Environment and Conservation
General Permit for Bank Stabilization

Effective Date: July 1, 2010
Expiration Date: June 30, 2015

Activities Covered by this Permit:
This general permit authorizes the repair and protection of eroded stream and reservoir banks. Bank stabilization activities typically include grading of the bank to the appropriate slope, based on hydrology, in conjunction with the placement of riprap, gabion baskets and/or installation of bioengineering techniques. Bioengineering techniques shall incorporate primarily materials found in the natural riparian environment, such as cedar tree revetments, rock or log current deflection weirs, live willow post application and log crib structures.

Limitations of this Permit:
Certain activities due to size, location or potential water quality impacts are not covered under this general permit. Those activities are described in this section. Activities 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.

1) Except as provided in item 1)a and 1)b of this section, the length of bank stabilization is limited to **300** linear feet.
   a. Activities located within water resource development lands and waters, including flowage easements, managed by the Tennessee Valley Authority or the United States Corps of Engineers **are not** limited to 300 linear feet.
   b. Activities using bioengineering techniques **are not** limited to 300 linear feet.
2) Activities that may adversely affect wetlands are not covered.
3) Activities located in any waterways which have been identified by the department as having contaminated sediments, and the activity will likely mobilize the contaminated sediments are not covered.
4) Activities that may result in an adverse effect to a threatened or endangered species, or to designated critical habitat; or is likely to jeopardize the continued existence of a species proposed for listing as endangered or threatened without prior authorization from the U.S. Fish and Wildlife Service as required by section 7 or section 10 of the Endangered Species Act where applicable are not covered. Adverse effects comprise, but are not necessarily limited to, the following: (a) death or injury to one or more individuals that results from activities associated with an action, (b) a change in habitat quantity or quality that results from activities associated with an action that renders the habitat unsuitable for the species, or (c) activities associated with an action that disrupts normal behavior or functions of individuals.
5) Activities that may result in the take, harassment, or destruction of plant or wildlife listed as threatened or endangered or a species deemed to be in need of management, as defined and identified under Tennessee Code Annotated (TCA) 70-08-103, Tennessee Wildlife Resources Agency (TWRA) Proclamations 00-14 and 00-15, and Division of Natural Heritage (DNH) Rule 0400-6-2 or which will destroy the habitat of such species without prior authorization from TWRA and/or DNH where applicable are not covered.
6) Activities, either individually or cumulatively, that may result in degradation to waters of the state are not covered. For example, this general permit shall not be used in incremental means to combine with other projects to alter larger areas of stream.
7) Activities that otherwise require an individual permit are not covered.

Obtaining Permit Coverage:
Coverage under this general permit may be obtained by submitting a signed and completed application (form CN-1091) to the division. Work shall not commence until written authorization from the division is received. As noted above, not all activities can be covered under this general permit, and an application for coverage may be denied when appropriate.

Certain activities do not require the submittal of an application or written authorization from the division prior to commencement of work. Those activities are:
1) where the length of the stream or reservoir bank to be treated does not to exceed a total length of 50 feet (limited to one site per 1000 linear feet of stream or reservoir bank and may be done only once without notification); or
2) 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).

However, authorization from the appropriate federal management agency (TVA or USCOE) must first be obtained. Even though written authorization is not required, the proposed activity shall be performed in accordance with all limitations, terms and conditions of this permit, and authorization from the appropriate federal management agency (TVA or USCOE) must be obtained.

Where written 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's expiration date.

Terms and Conditions of this Permit:
All activities covered under this general permit shall comply with all terms and conditions contained hereinafter.

1) All 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) 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 (including trout streams and naturally reproducing trout streams), livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.
3) 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.
4) 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.
5) Sediment shall be prevented from entering waters of the state. Erosion and sediment control measures 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. Information on erosion and sediment control measures can be found in the department's Erosion and Sediment Control Handbook (www.tn.gov/environment/wpc/sed_ero_controlhandbook/).
6) 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.
7) 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.
8) 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.
9) 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.
10) The activity may not be conducted in a manner that would permanently disrupt the movement of fish and aquatic life.
11) Stream beds shall not be used as transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream banks are disturbed. The crossing shall be constructed so that stream flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.
12) Materials used in bank stabilization shall include clean rock, riprap, anchored trees or other non-erodible materials found in the natural environment. Unsuitable materials (e.g., trash, debris, car bodies, asphalt, etc.) are strictly prohibited. Furthermore, the materials 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).
13) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.

14) 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.
15) This general permit does not authorize impacts to cultural, historical or archaeological features or sites.
16) 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.

APPROVED: Paul E. Davis DATE: 6/29/10

Paul E. Davis, Director, Water Pollution Control