



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Robert L. Ehrlich, Jr.  
Governor

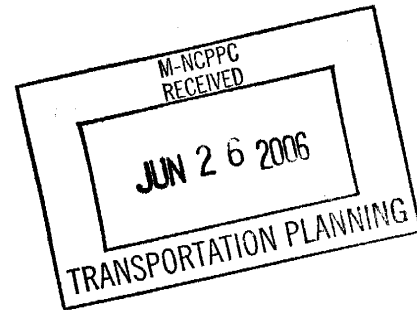
Kendal P. Philbrick  
Secretary

Michael S. Steele  
Lt. Governor

Jonas A. Jacobson  
Deputy Secretary

Date: June 23, 2006

Re: Notice of Permit Decision  
Nontidal Wetlands and Waterways Permit Application  
Tracking Number 04-NT-0408/200560011



Dear Property Owner, Public Official, or Interested Person:

Pursuant to Environment Article Sections 5-503(a) and 5-906(a) and Code Maryland of Regulations (COMAR) 26.17.04, 26.23.01 and 26.08.02, the Water Management Administration has made a decision and has issued the above referenced Nontidal Wetlands and Waterways Permit to:

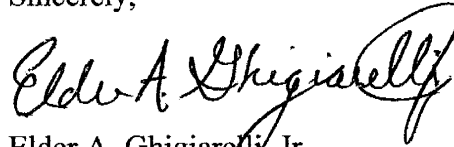
**Maryland State Highway Administration  
Maryland Transportation Authority**

For: Construction of an 18 mile, access controlled, multi-modal highway linking I-270 and I-95/US 1 extending from I-370/I-270 near the Shady Grove Metrorail Station southeast to I-95/US 1 south of Laurel. The highway includes eight interchanges, located at MD 355, Shady Grove METRO Access/Shady Grove Road, MD 97 (Georgia Ave.), MD 182 (Layhill Road), MD 650 (New Hampshire Ave.), US 29/Briggs Chaney Road, I-95 and Virginia Manor Road, and an at grade intersection with US 1. In addition, the project includes portions of an east-west bicycle/pedestrian trail within the project right-of-way, and park-and-ride lots constructed in the southwest quadrant of ICC/MD 97, the northeast quadrant of ICC/MD 182, and the southwest quadrant of ICC/US 29. The highway and associated improvements will permanently impact (1) 47.79 acres of nontidal wetlands, consisting of 16.12 acres of forested and scrub/shrub nontidal wetlands, including 0.86 acre of isolated nontidal wetlands, and 31.67 acres of emergent nontidal wetlands, including 2.43 acres of isolated nontidal wetlands; (2) 40.03 acres of nontidal wetlands buffer; (3) 38,088 linear feet of stream; (4) 32.4 acres of nontidal floodplain; and (5) 9.09 acres of open water ponds(s). The project will permanently convert 0.34 acre of forested and scrub/shrub nontidal wetlands to emergent wetlands (under bridges). In addition, the construction will temporarily impact 3.01 acres of nontidal wetlands, 2.86 acres of nontidal wetlands buffer, and 768 linear feet of stream. Compensatory mitigation for wetland and waterways impacts will be provided through numerous wetland creation, wetland restoration, stream restoration, and stormwater retrofit projects at multiple offsite locations. The project is proceeding as "design-build" and is subject to additional review for avoidance and minimization, and compliance with nontidal wetlands and waterways regulations, as addressed in the special conditions of the Permit.

Notice of Permit Decision  
Tracking Number 04-NT-0408/200560011  
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If you have any questions or need any additional information, please do not hesitate to contact me at (410) 537-3763.

Sincerely,

A handwritten signature in black ink, reading "Elder A. Ghigiarelli, Jr.", written in a cursive style.

Elder A. Ghigiarelli, Jr.,  
Deputy Program Administrator  
Wetlands and Waterways Program

EAGJr

Enclosures

cc: Renee Matthews (WMA)

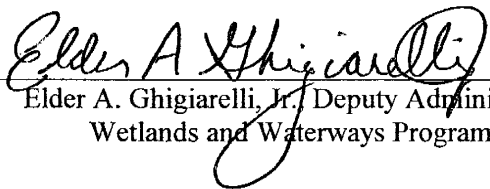
Notice of Decision

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Page Two

Nontidal wetlands and waterways permit application 04-NT-0408/200560011 meets the criteria set forth in statute and regulation governing impacts to nontidal wetlands and waterways. Nontidal wetlands and waterways permit number 04-NT-0408/200560011 is hereby issued by the Water Management Administration to authorize the Maryland State Highway Administration and Maryland Transportation Authority to conduct regulated activities necessary to construct an 18 mile, access-controlled, multi-modal highway linking I-270 and I-95/US1 extending from I-370/I-270 near the Shady Grove Metrorail Station southeast to I-95/US1 south of Laurel. The highway includes eight interchanges, located at MD 355, Shady Grove METRO Access/Shady Grove Road, MD 97 (Georgia Avenue), MD 182 (Layhill Road), MD 650 (New Hampshire Avenue), US 29/Briggs Chaney Road, I-95 and Virginia Manor Road, and an at-grade intersection with US1. In addition, the project includes portions of an east-west bicycle/pedestrian trail within the project right-of-way and park-and-ride lots constructed in the southwest quadrant of ICC/MD97, the northeast quadrant of ICC/MD 182, and the southwest quadrant of ICC/US29. The work will result in (1) the permanent loss of 47.79 acres of nontidal wetlands, consisting of 16.12 acres of forested and scrub/shrub nontidal wetlands, including 0.86 acre of isolated nontidal wetlands, and 31.67 acres of emergent nontidal wetlands which includes 2.43 acres of isolated nontidal wetlands; (2) the conversion of 0.34 acre of forested and scrub/shrub nontidal wetlands to emergent nontidal wetlands (under bridges); (3) temporary impacts to 3.01 acres of nontidal wetlands; (4) permanent impacts to 40.03 acres of nontidal wetlands buffer and temporary impacts to 2.86 acres of nontidal wetlands buffer; (5) permanent impacts to 38,088 linear feet of stream and temporary impacts to 768 linear feet of stream; (6) permanent impacts to 32.4 acres of nontidal floodplain; and (7) permanent impacts to 9.09 acres of open water pond(s). Mitigation for the nontidal wetlands and waterways impacts will consist of numerous wetland creation, wetland restoration, stream restoration, and stormwater retrofit projects at multiple offsite locations. The project location is in central and eastern Montgomery County and northwestern Prince George's County.

An explanation of the rationale for this decision is contained in the attached Summary of Basis for Decision.



Elder A. Ghigiarelli, Jr. Deputy Administrator  
Wetlands and Waterways Program

June 13, 2006  
Date

## **MDE'S INVOLVEMENT IN THE ICC STUDY**

The Department played an integral role in the development of the Environmental Impact Statement (EIS) for the ICC. As the major regulatory agencies, MDE and the Corps were closely involved at each juncture of the ICC study including Project Purpose and Need, Alternatives Retained for Detailed Study, and the Preferred Alternative and Conceptual Mitigation.

MDE has been an active participant on the Interagency Working Group (IAWG), a multi-agency workgroup comprised of environmental managers and regulatory staff from federal, State, and local agencies involved in the project. The purpose of the IAWG is to provide input and technical expertise on the myriad of issues associated with the project. The IAWG has met on a monthly basis since the initiation of the ICC study and guided the preparation of information in the environmental documents and permit applications for the ICC. It is also important to note that the IAWG will continue to play a role in the design-build phase of the project.

In addition to its work on the IAWG, the Department played an active role in the ICC's Principal Plus 1 (P+1) Meetings, an executive/senior management group which met every several months to address policy issues related to key project milestones and to discuss components of the EIS and related issues. In combination, the IAWG and P+1 convened for approximately 35 meetings since June of 2003 to review and discuss alternatives development, avoidance and minimization measures, compensatory mitigation and environmental stewardship opportunities, and to address specific agency information and requirements associated with the project.

In addition to the IAWG and P+1 meetings, MDE participated in numerous field visits and other meetings to discuss and address many technical issues that arose during the project development process. The Department's major focus throughout the study process centered on the avoidance and minimization of impacts to nontidal wetlands, waterways, 100-year floodplain, and to water quality, particularly in Use III, natural trout stream watersheds.

In its role as a Cooperating Agency in the ICC study, the Department reviewed and provided comments on the following documents and concurred at each of the three key milestones of the process: (1) purpose and need for the project; (2) alternatives retained for detailed study; and (3) the preferred alternative and conceptual mitigation.

- Purpose and Need Statement
- Alternates Retained for Detailed Study Package
- ICC Mitigation and Environmental Stewardship Needs and Opportunities Inventory
- Natural Environment Technical Report
- Preliminary Draft EIS
- Environmental Stewardship and Compensatory Mitigation Packages
- Draft EIS
- Comparative Water Resources Hazards Assessment (potential impacts to the Rocky Gorge Reservoir)
- Preferred Alternative and Conceptual Mitigation Package
- Preliminary Final EIS
- Final EIS

In November, 2004, the Draft EIS was released for public review. This document was incorporated by reference into SHA's nontidal wetlands and waterways permit application which was received by MDE on October 1, 2004. The Draft EIS and subsequent Final EIS contain a comprehensive, in-depth analysis of the alternatives retained for detailed study.

In August, 2005 SHA distributed its Preferred Alternative and Conceptual Mitigation Package (PACM) to MDE and the Corps. The PACM identified Corridor 1 as the preferred alternative.

#### Corridor 1 - Preferred Alternative

The Department has concluded that, given the number and types of resources and wide range of functions and values, as well as the resource impact avoidance and minimization measures, including longer bridges and innovative stormwater management (SWM) measures, environmental stewardship, and the commitment of sufficient mitigation for unavoidable impacts, that neither alternative is clearly better in terms of impacts to the natural environment.

The Department's agreement with Corridor 1 as the preferred alternative is based on the following considerations:

1. The acreage of nontidal wetlands impacts associated with Corridor 1 is less than Corridor 2AX or Corridor 2DB (47.79 acres versus 50.51 acres and 53.57 acres, respectively). As discussed below under the heading Avoidance and Minimization, approximately 30 acres of the nontidal wetlands impacts associated with either corridor are to a monotypic stand of Phragmites, a low-value wetland plant species which has developed incidental to mining activities on the Konterra property in Prince George's County.
2. Although Corridor 1 crosses the Paint Branch watershed, the innovative SWM and redundant erosion and sediment control measures will minimize impacts to the Upper Paint Branch, a Use III natural trout stream watershed (see section on Avoidance and Minimization). In addition, the Environmental Stewardship package includes several stormwater retrofit projects which aid in offsetting existing (pre-construction) water quality impairments (see Environmental Stewardship section).
3. The presence of broad riparian systems with numerous interconnected functions and values makes avoidance and minimization in the form of long bridges and other measures more practicable along Corridor 1. Although extensive avoidance and minimization measures have also been employed on Corridor 2, the more numerous riparian areas are smaller in size, making extensive bridging less practicable.
4. Corridor 1 would have fewer community impacts due to its inclusion in the Montgomery County Master Plan. Existing and planned development has occurred in anticipation of an ICC in the Corridor 1 location. Corridor 2 would result in significant impacts to local land use patterns in the Spencerville/Burtonsville region. Due to the development that has occurred in the vicinity of Corridor 2, the preferred alignments through this area (Corridor 2AX and 2DB) would fragment these communities and result in significant residential displacements.

In summary, the Department has determined that the alternatives analysis contained in the Draft EIS and, as further refined in the Final EIS, satisfies the State's nontidal wetlands practicable alternatives analysis requirements, and that design constraints, including the linear east-west nature of the project which crosses numerous waterways and stream valleys, necessitate the proposed impacts to nontidal wetlands and waterways.

## **CORRIDOR 1 ALTERNATIVE – OPTIONS**

Having determined that there is no practicable alternative, authorization of the preferred alternative included consideration of several important options associated with a preferred Corridor 1 alignment. These options include Rock Creek Option A versus Rock Creek Option C, the MD 182 (Layhill Road) interchange, Northwest Branch Option A versus Option B, the extension of Corridor 1 to US 1, and inclusion of the bicycle/pedestrian trail.

### Rock Creek Option A versus Option C

Rock Creek Options A and C were developed to achieve a balance among natural, cultural, and socioeconomic impacts. Rock Creek Option A would be the shortest alignment while Option C is 0.3 mile longer.

Regulated impacts resulting from Option A consist of 0.95 acres of nontidal wetlands, 1,303 linear feet of stream, and 5.1 acres of floodplain. Option C, the selected alignment, impacts 0.4 acres of wetland, 1,919 linear feet of stream, and 1.1 acres of floodplain. Although Option C results in fewer nontidal wetlands impacts than Option A, it results in an increase to waterways (linear feet of stream) impacts. Based on this consideration and, relative to the impacts of the project as a whole to these resources, the Department concluded that either Option A or Option C was an acceptable alignment.

### MD 182 (Layhill Road) Interchange

A proposed interchange at Layhill Road was evaluated as an option of both Corridors 1 and 2. Without an interchange at this location, motorists on Layhill Road would have to access the ICC at MD 97 or at MD 650, a travel distance of 3 miles and 3.5 miles, respectively. This would increase traffic on the local east-west road network that would otherwise experience a reduction in traffic. Because the interchange increases wetland impacts by only 0.01 acre, and does not affect stream or floodplain impacts, the public benefits of the proposed interchange far outweigh the environmental impacts.

### Northwest Branch Option A versus Option B

Northwest Branch Option A was developed for the purpose of minimizing impacts to natural resources. It is described as the "S-curve" option because it follows a curving path that swings outside the reserved corridor to the north, then swings down across the corridor to the south, and then curves back to the north and rejoins the corridor. The curving alignment of Option A allows for perpendicular crossings of floodplains and streams, which are preferable from an environmental standpoint. Northwest Branch Option B follows a straighter path which remains within the reserved ICC corridor.

walls, steep side slopes, and narrow median widths; bridging of major and sensitive stream crossings; the use of long and high bridges to allow vegetation and habitat to be maintained beneath the roadway, and maintenance of wildlife connectivity in linear parklands affected by the project; and innovative SWM and advanced water quality treatment that exceed State requirements.

### Nontidal Wetlands and Waterways

The majority of the major stream valleys in the study area, where the greatest number of wetlands and waterways are located, are oriented in a north-south direction making complete avoidance of these resources impossible by an east-west roadway. Consequently, extensive efforts to avoid and minimize potential direct impacts to these resources took place during the ICC study process. During the final design and construction phases of the project, avoidance and minimization will continue as the project moves forward to more detailed stages of design. Final design plans will require review and approval from the Department.

From the initiation of the current ICC study, efforts to avoid and minimize direct impacts to wetlands and stream channels have been a major goal. Avoidance and minimization techniques included alignment shifts, replacement of culverts with bridges, and reductions in overall roadway section width at stream crossings where safety considerations allow. Bridges were proposed at twelve stream/wetland crossings along Corridor 1 and seven crossings along Corridor 2. During the study, bridge lengths and heights were adjusted to minimize impacts. For example, along Corridor 1 in the sensitive Paint Branch watershed, at the crossing of Good Hope Tributary, Paint Branch's primary trout habitat, the preliminary bridge was lengthened in the Draft EIS to avoid stream valley impacts, reduce fill on valley slopes, and allow for more room to provide erosion control protection during construction. In addition, the potential for thermal impacts from bridge runoff will be avoided through a conveyance system on the underside of the bridge that will direct stormwater away from the Good Hope Tributary. In the Final EIS, the bridge was lengthened an additional 30 feet to reduce floodplain impacts. Gum Springs, also in the Paint Branch watershed, will be spanned by a bridge which will be designed to divert stormwater away from primary trout habitat areas. The profile of the bridge was lowered in the Draft EIS to reduce the amount of fill needed on the knoll between Gum Springs and the Paint Branch mainstem. In the Final EIS, the bridge profile was raised and the bridge extended to span both Gum Springs tributary and the Paint Branch mainstem, reducing impacts to both streams.

Reductions in roadway section widths were proposed at the major crossings and elsewhere along both alignments. Roadway width reductions not only included reduced sections, but also reduced safety grading, and 2:1 side slopes where feasible. As the study progressed towards finalization of the EIS, additional measures to reduce impacts included new alignment shifts, additional length to proposed bridges, the use of longer wing walls on select bridges and retaining walls elsewhere to minimize the amount of fill within adjacent wetlands, and the shifting of SWM facilities outside of wetlands and waters.

Despite the extensive avoidance and minimization measures employed in the current ICC study, nontidal wetland impacts (approximately 48 acres) are greater than those identified in the previous 1997 study (approximately 20 acres). The major reason for this increase involves impacted wetlands incidental to mining activities on the heavily mined Konterra property at the

During construction, erosion and sediment control measures to control both coarse and fine sediment will be implemented. These measures will comply with MDE requirements, and will exceed MDE regulations in locally-designated Special Protection Areas (SPAs). Redundant erosion and sediment control measures will be utilized in the Paint Branch and Upper Rock Creek SPAs to minimize potential control measures that could deliver sediment-laden runoff to these sensitive stream systems. Examples of redundant controls include placing two rows of silt fence in an area or one row of silt fence and the placement of a sediment trap as well; and faster implementation of stabilization measures than State regulations require. In addition, all in-stream work for culverts and bridges will be carried out in compliance with MDE requirements related to restricted work closure periods for the designated use class of all streams in the study area to protect aquatic species. Finally, during detailed design, additional opportunities to incorporate redundant erosion and sediment controls will be identified.

Stormwater management techniques will be implemented in accordance with MDE requirements for both quantity and quality of stormwater. To provide further protection of existing stream conditions, SHA is proposing to exceed the minimum regulatory requirement for water quality control by providing control for up to a 1.5-inch rainfall event rather than the required 1.0-inch rainfall event throughout the project area. This SWM measure will capture and treat 95% of all rainfall events, exceeding State requirements. In some areas, SHA is proposing additional SWM "enhancements" to provide additional water quality benefits. These techniques include grassed swales, infiltration and filtration practices, ponds, underground storage, and other BMPs. Effective treatment is also provided by filtration of sheet flow in vegetated areas as well as check dams that provide filtration, infiltration, and nutrient uptake.

During the course of the ICC study, potential water quality impacts, particularly within the Use III and Use IV watersheds, have been of major concern to MDE. In these temperature sensitive watersheds, SWM facilities will be designed to infiltrate a portion of the heated runoff and allow for underground cooling. A linear SWM approach has been developed for use in the Upper Paint Branch and Upper Rock Creek SPAs. Sediments and attached pollutants will be removed from runoff as it passes through vegetation and then into linear bioretention/filtration systems. These systems will also provide heat dissipation to minimize temperature impacts at the discharge point. Because the Upper Paint Branch is designated as a Use III, natural trout stream, with a self-sustaining trout population, this watershed warrants particular attention in this Summary of Basis for Decision.

#### Upper Paint Branch Watershed

The Upper Paint Branch is a high quality water resource and the ICC study has focused on minimizing impacts to water quality in this watershed. MDE believes that the extensive avoidance and minimization measures that will be implemented in the design of Corridor 1, the preferred alternative, along with compensatory mitigation and environmental stewardship projects planned in the watershed will meet the federal and State anti-degradation policies for maintenance of water quality.

The ICC roadway design through the Paint Branch watershed includes numerous features specifically designed to minimize potential water quality impacts. These features include the following:



- The “first flush” of runoff from the Montgomery County Maintenance Depot that presently discharges to a tributary of the Good Hope Tributary will be captured, treated and discharged to the Northwest Branch watershed to reduce existing water quality impacts in the Good Hope Tributary from this runoff. Removal of these potentially heated discharges will increase the cool base flow buffering capacity of this tributary on the overall Good Hope Tributary system; and
- All discharges to wetlands or waters of the State will be treated for water quality prior to discharge.

During construction, the SHA will meet or exceed all State requirements related to erosion and sediment control, SWM, and the required time-of-year work restriction for Use III waters. This will be accomplished through the following requirements:

- No instream work will take place during the Use III stream closure period from October 1 through April 30;
- Erosion and sediment control measures will meet or exceed all State requirements. Redundant measures will be utilized in the Paint Branch watershed to reduce the potential for unintended sediment releases;
- A full-time on-site environmental construction inspection team with expertise in environmental science and knowledge of construction processes and sequences, particularly erosion and sediment control, SWM, and working in sensitive areas, will be provided by SHA. This team of Environmental Construction Inspectors (ECI’s) will have an understanding of construction plans, permit-defined limits of disturbance, approved erosion and sediment control plans, and all permit requirements. The ECI’s will identify and resolve unforeseen issues in the field and produce weekly inspection reports, erosion and sediment control rating reports, and quarterly compliance reports;
- An Independent Environmental Monitor (IEM) with no affiliation to the design or construction aspects of the project will also be provided by SHA to review the final design plans and to monitor construction. The IEM will be a full-time, on-site extension of MDE and the Corps. The IEM will monitor the design and construction phases of the project full-time to assure that all regulatory permit conditions are met; and
- Temporary impacts to nontidal wetlands will be ameliorated through on-site restoration to ensure that the water quality benefits of any temporarily impacted wetland are restored. All construction material will be removed and any compacted soils will be de-consolidated. Natural grade will be re-established and the area will be re-vegetated with a native wetland seed mix and trees and shrubs identified in the wetland prior to construction.

## **MITIGATION**

Compensatory mitigation is required for all necessary and unavoidable impacts to nontidal wetlands and waterways. MDE requires that compensatory mitigation for nontidal wetland impacts focus on the replacement of wetland function, values and acreage lost. In-kind mitigation (wetland creation) is the preferable form of compensatory mitigation. Mitigation requirements are based on the type of nontidal wetlands impacted. Emergent nontidal wetlands are mitigated on a 1:1 replacement basis, whereas a 2:1 ratio is required for forested and scrub-shrub wetlands.

Through its nontidal wetlands regulatory process, MDE can only require compensatory mitigation for nontidal wetland impacts. Thus, ES was not a consideration in the nontidal wetlands permit decision. However, ES can be a consideration in the State's WQC review pursuant to Section 401 of the federal Clean Water Act. This was particularly important with regard to potential water quality impacts in the Paint Branch watershed.

As noted in the previous section on mitigation, MDE has raised concerns throughout the ICC study process regarding potential water quality impacts to the Upper Paint Branch watershed. In addition to the extensive bridging and innovative SWM measures in the watershed, MDE believes that the mitigation package contains adequate compensation for potential water quality impacts to the Paint Branch. Regardless, given the importance of this watershed, SHA has offered, and MDE has accepted, implementation of ES projects to support MDE's issuance of the WQC for proposed discharges in the Paint Branch watershed. Thus, the WQC for the project requires that the permittee carry out the following ES projects to address existing problems from untreated stormwater runoff, erosion, and sedimentation that currently threaten the high quality of this resource:

- Five stream restoration projects, four of which are in the Upper Paint Branch, to provide stabilization and floodplain/riparian enhancements to reduce sedimentation and improve water quality and habitat; and
- Thirteen sites within the Paint Branch watershed to be retrofitted with SWM to treat currently untreated runoff. This treatment will decrease erosive flows and increase stormwater infiltration, resulting in improvements to water quality.

The WQC requires that four of the SWM retrofit projects be constructed prior to any highway construction within the Paint Branch watershed. The remaining ES projects will be constructed prior to, or concurrent with highway construction.

## **DETAILED DESIGN AND CONSTRUCTION**

The ICC is a design-build project which means that the final design plans for the project will be developed by the contractor selected for construction of the project. Incentives will be incorporated into the contract to further avoid and minimize impacts to nontidal wetlands and waterways. It is important to note that all final design plans require review and approval from MDE.

Potential impacts during construction is a serious concern to MDE. To address this concern, the SHA has developed an Environmental Management Plan (EMP) to facilitate success of the ICC during the construction phases of the project. The development and implementation of an EMP has worked successfully on other high profile, environmentally sensitive projects including the Woodrow Wilson Bridge Project, and the design-build U.S. 113 Project. The key components of the EMP include:

- Creation and management of a Record of Decision/permit tracking database;
- Implementation of an environmental design review team;
- Implementation of an environmental construction inspection team;
- Implementation of a mitigation/environmental stewardship design and construction team;

locations of the public hearings. The brochure contained a postage-paid comment form for people to mail their written comments;

- Newspaper Advertisements/News Releases. The availability of the Draft EIS and public hearing announcements were placed in local and regional newspapers to encourage people to review and comment on the document;
- Interactive Project Website. A project website was created which included an online public hearing where members of the public could “attend” when it was most convenient for them. Citizens could email the SHA project study team and/or submit comments to the lead agencies on the website;
- ICC Information Centers/Draft EIS and Technical Report Locations. Locations throughout the project study area served as places where members of the public could visit and view mapping, newsletters, and other project materials in proximity to their home or business. The Draft EIS and Technical Reports were placed in various Information Centers for public review and comment; and
- Bilingual Outreach. Because Spanish-speaking populations were identified in the project study area, public hearing fliers were translated into Spanish, a Spanish interpreter was present at the public hearings, and a Spanish link to the ICC website was available.

## **ORAL AND WRITTEN COMMENTS RECEIVED**

Testimony received at the four public hearings and written comments on the Draft EIS and Final EIS covered a wide range of issues including but not limited to purpose and need for the project; environmental impacts to wetlands, waterways, forests and parkland; erosion and sediment control; SWM; secondary and cumulative effects; smart growth; tolls; and the hiker-biker trail. In total, 283 persons testified at the public hearings and over approximately 3,800 written comments were received on the project.

Regarding impacts to wetlands and waterways, particular concern was raised about potential water quality impacts to the Paint Branch and other sensitive water bodies within the project study area. During the course of the ICC study, potential impacts to these sensitive areas were extensively evaluated, and avoidance and minimization measures, including compensatory mitigation and environmental stewardship measures, were developed to address these issues.

As previously discussed, the ICC study paid special attention to the Paint Branch watershed and the brown trout issues. The Draft EIS and Final EIS analyze direct and indirect impacts to the Paint Branch and other sensitive water bodies and provide a comprehensive review of the extensive information about these water bodies that has been collected over many years by local, state and federal agencies, as well as the information developed during the course of the study.

Although MDE realizes that impacts to these sensitive resources cannot be completely avoided, the potential effects on water quality in the Paint Branch watershed and other sensitive water bodies have been greatly minimized by the many avoidance and minimization measures incorporated into the project. As discussed previously, these measures include long bridges over the Good Hope, Gum Springs, and Paint Branch in the Paint Branch watershed, and other sensitive waterways in the project study area. In addition to bridging stream, wetland and, in some cases, entire floodplain systems, avoidance and minimization measures include implementing innovative SWM measures management to reduce potential thermal impacts;

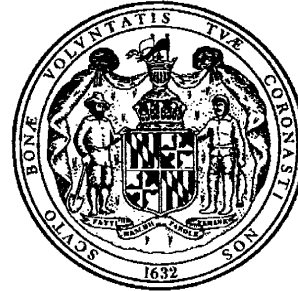
**STATE OF MARYLAND  
DEPARTMENT OF THE ENVIRONMENT  
WATER MANAGEMENT ADMINISTRATION**

**NONTIDAL WETLANDS AND WATERWAYS PERMIT**

PERMIT NUMBER: 04-NT-0408/200560011  
EFFECTIVE DATE: June 23, 2006  
EXPIRATION DATE: June 23, 2011

PERMITTEE: Maryland Department of Transportation  
State Highway Administration  
707 N. Calvert Street  
Baltimore, MD 21202  
Attn: Ms. Susan M. Ridenour

Maryland Department of Transportation  
Maryland Transportation Authority  
300 Authority Drive  
Baltimore, MD 21222  
Attn: Mr. Keith Duerling



In accordance with Environment Article §5-503(a) and §5-906(b), Annotated Code of Maryland (1996 Replacement Volume), Code of Maryland Regulations (COMAR) 26.17.04 and 26.23.01, and the attached general and specific conditions, the Maryland Department of Transportation, State Highway Administration and Maryland Transportation Authority are hereby authorized by the Water Management Administration (Administration) to conduct regulated activities in nontidal wetlands, buffers, or expanded buffers, and/or to change the course, current, or cross-section of waters of the State, in accordance with the project plates/drawings (permit drawings) contained in Appendix A of the Final Environmental Impact Statement (FEIS), as further refined since the FEIS, and as described below:

This permit authorizes construction of an 18 mile, access controlled, multi-modal highway linking I-270 and I-95/US 1 extending from I-370/I-270 near the Shady Grove Metrorail Station southeast to I-95/US 1 south of Laurel. The highway includes eight interchanges, located at MD 355, Shady Grove METRO Access/Shady Grove Road, MD 97 (Georgia Ave.), MD 182 (Layhill Road), MD 650 (New Hampshire Ave.), US 29/Briggs Chaney Road, I-95 and Virginia Manor Road, and an at grade intersection with US 1. In addition, the project includes portions of an east-west bicycle/pedestrian trail within the project right-of-way, and park-and-ride lots constructed in the southwest quadrant of ICC/MD 97, the northeast quadrant of ICC/MD 182, and the southwest quadrant of ICC/US 29. The highway and associated improvements will permanently impact (1) 47.79 acres of nontidal wetlands, consisting of 16.12 acres of forested and scrub/shrub nontidal wetlands, including 0.86 acre of isolated nontidal wetlands, and 31.67 acres of emergent nontidal wetlands, including 2.43 acres of isolated nontidal wetlands; (2) 40.03 acres of nontidal wetlands buffer; (3) 38,088 linear feet of stream; (4) 32.4 acres of nontidal floodplain; and (5) 9.09 acres of open water ponds(s). The project will permanently convert 0.34 acre of forested and scrub/shrub nontidal wetlands to emergent wetlands (under bridges). In addition, the construction will temporarily impact 3.01 acres of nontidal wetlands, 2.86 acres of nontidal wetlands buffer, and 768 linear feet of stream. Compensatory mitigation for wetland and waterways impacts will be provided through numerous wetland creation, wetland restoration, stream restoration, and stormwater retrofit projects at multiple offsite locations. This project is proceeding as "design-build" and is subject to additional review for avoidance and minimization, and compliance with nontidal wetlands and waterways regulations, as addressed in the special conditions of this authorization.

Amanda L. Sigillito, Chief  
Nontidal Wetlands and Waterways Division

### GENERAL CONDITIONS

1. Validity: The Permit is valid only for use by the Permittee. The Permit may be transferred only with prior written approval of the Administration. In the event of transfer, the transferee agrees to comply with all terms and conditions of the Permit.
2. Initiation of Work, Modifications, and Extension of Term: The Permittee shall initiate authorized activities within two (2) years of the Effective Date of this Permit or the Permit shall expire. The Permittee may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of the Permit, including the approved Permit Drawings, or, (c) not later than 45 days prior to expiration date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state the reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. Responsibility and Compliance: The Permittee is fully responsible for all work performed, and activities authorized by the Permit shall be performed in compliance with the Permit and Approved Plans. The Permittee agrees that a copy of the Permit and Approved Plans shall be kept at the construction site and provided to its employees, agents and contractors. A person (including the Permittee, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of the Permit, Approved Plans or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Environment Article, Annotated Code of Maryland (1996 Replacement Volume).
4. Failure to Comply: If the Permittee, its employees, agents or contractors fail to comply with the Permit or Approved Plans, the Administration may, in its discretion, issue an administrative order requiring the Permittee, its employees, agents and contractors to cease and desist any activities which violate the Permit, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. Suspension or Revocation: The Permit may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if the Permittee: (a) submits false or inaccurate information in the Permit application or subsequently required submittals; (b) deviates from the Approved Plans, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of the Permit; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Environment Article, Annotated Code of Maryland as amended; (e) fails to post a bond if required pursuant to COMAR 26.23.04.04(B); (f) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (g) fails to comply with the requirements of an administrative action or order issued by the Administration; or (h) does not have vested rights under the Permit and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. Other Approvals: The Permit does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. Site Access: The Permittee shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with the Permit. The Permittee shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. Inspection Notification: The Permittee shall notify the Administration's Compliance Division at (410) 537-3510 at least five (5) days before starting activities authorized by the Permit and five (5) days after completion.
9. Sediment Control: The Permittee shall obtain approval from the Administration for an erosion and sediment control plan specifying soil erosion control measures. The approved erosion and sediment control plan shall be included in the contract specifications, and shall be available at the construction site.
10. Federally Mandated State Authorizations:  
X Water Quality Certification: Water Quality Certification (WQC) is granted for this project provided that all work is performed in accordance with the conditions of this Permit and the conditions of the attached Water Quality Certification.

EFFECTIVE DATE: June 23, 2006

19. Minimum Disturbance: Any disturbance of stream banks, channel bottom, nontidal wetlands, and nontidal wetlands buffer authorized by this Permit shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be vegetatively stabilized no later than seven (7) days after construction is completed or in accordance with approved erosion and sediment control plan(s).
20. Restoration of Construction Site: The Permittee shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by the Permittee as directed by the Administration.
21. Nontidal Wetland and Stream Mitigation Requirements: The Permittee shall mitigate for impacts to nontidal wetlands and streams in accordance with the approved Compensatory Mitigation Package agreed to by the ICC Interagency Working Group which is incorporated by reference into this Permit.

THE FOLLOWING SPECIAL CONDITIONS APPLY TO ALL ACTIVITIES AUTHORIZED BY PERMIT NO. 04-NT-0408/200560011.

### SPECIAL CONDITIONS

1. Avoidance and Minimization: This Permit conveys authorization to impact wetlands, wetland buffers, waters, and the regulated floodplain within the limit of disturbance as shown on the permit drawings titled "ICC Corridor 1" dated 1 May 2006. Avoidance and minimization of impacts to these regulated resources shall be emphasized throughout the remainder of the design and construction process (see Special Condition #17).
2. Best Management Practices: The provisions contained in the attached "Best Management Practices for Working in Wetlands and Waterways" are a part of this permit.
3. Pre-proposal / Preconstruction Meetings: The Nontidal Wetlands and Waterways Division (Division) shall be invited to attend a scheduled pre-proposal meeting with the potential design-build contractors for each contract. At this meeting, the Division will present the Permit conditions and address the contractor's questions. Following award of any Design-Build contract related to this permit, the Permittee will schedule a meeting with the Contractor, Subcontractors, SHA staff, and the Division to discuss requirements of the Permit, compliance measures, design review and coordination, and scheduling. The Division shall be notified of this meeting a minimum of 14 days prior to the date of the meeting. This meeting may be in conjunction with a partnering activity or other regulatory agency meeting.
4. Regulated Impacts - Plan Submittal: Prior to any disturbance to a State regulated nontidal wetland, nontidal wetland buffer, or nontidal waterway, including the regulated 100-year floodplain, detailed plan submittals for the proposed impacts must be submitted to and approved by the Administration.
5. Erosion and Sediment Control Plan Submittal: Detailed Erosion and Sediment Control Plans and associated specifications for work involving permanent and temporary impacts to nontidal wetlands and their regulated buffers shall be submitted to and approved by the Administration prior to work in these areas. Plans should include methods for the protection of water quality; maintenance of streamflow; dewatering, and measures to prevent the release of sediment and other contaminants into regulated areas; provisions to prevent accidental entry of persons or equipment; measures to maintain existing hydrology to adjacent areas both during construction and following completion; and, for temporary impacts, methods to minimize disturbance and restore function.
6. Stormwater Management Plan Submittal: Detailed Stormwater Management Plans shall be submitted to and approved by the Administration prior to any work in regulated resource areas. No stormwater management structures, other than those listed in Special Condition #34, shall be placed in wetlands or waterways. The use of rip-rap shall be minimized in order to reduce thermal impacts to waters. Stormwater shall be controlled to prevent washing of sediments, trash, and debris into receiving nontidal wetlands or waterways.
7. Construction Phasing: The Permittee shall submit and periodically update a construction schedule and sequencing plan to the Administration in order to facilitate timely review of design submittals and construction compliance. The construction schedule should include any offsite activities that may be subject to regulation and approval, such as stockpile and disposal, construction of access to the project, and project related utility construction.

an analysis of the hydrologic conditions supporting the wetland; measures to restore hydrology to pre-impact conditions; measures to mitigate compaction; and restoration plans, including landscaping with appropriate species. No materials, equipment, debris, or excavated soils will be stockpiled or stored within temporarily impacted wetlands or regulated buffers.

13. Changes to Approved Impacts: Should final design result in necessary impacts to any wetlands or waterways greater than those approved in this Permit, a Permit Modification shall be required prior to initiation of work in these areas.
14. Associated Impacts: Impacts to nontidal wetlands, buffers, and waterways, both temporary and permanent, resulting from activities associated with this project, including utility relocation; disposal of materials; access; temporary storage facilities; stewardship measures; or related activities, are subject to all conditions of this Permit including review and approval of submittals prior to initiation of work within regulated areas.
15. Sediment Basin Removal: The removal of the existing sediment basin on the Konterra property in the vicinity of I-95 Station #790 will require a Dam Safety Permit from the Administration. Detailed plans for the removal of this sediment basin shall be submitted to the Administration. Plans shall include a design report that addresses existing conditions; proposed dewatering method; proposed erosion and sediment control; proposed grading including any special requirements for handling saturated soils; proposed stabilization methods; and stream restoration (see Special Condition #26).
16. Partially/Temporarily Impacted Wetlands / Waterways: At the completion of construction, the Permittee shall demonstrate to the satisfaction of the Administration that any partially / temporarily impacted wetlands / waterways have not suffered a loss of functions and values as a result of the impacts. At the request of the Permittee, the Administration will participate in field assessments to determine current status of these wetlands and will make recommendations for their restoration. The Permittee shall mitigate for any loss of functions and values in accordance with regulatory standards and the approved mitigation plans.

#### **Avoidance and Minimization**

17. To the extent practicable, the Permittee shall further avoid and minimize impacts to jurisdictional wetlands and streams in the development of final design plans and during construction. This Permit conveys authorization to impact wetlands, wetland buffers, waters, and the regulated floodplain within the limit of disturbance as shown on the permit drawings, with the caveat that temporary and permanent stream impacts are limited to no more than 25 feet from the ends of culverts and rip-rapped pipe outlets. The limit of disturbance includes the total project area extending to 25 feet beyond the grading limits, and 25 feet beyond each parapet of any proposed bridge. This area may be disturbed for ditches, silt fence, construction equipment access roads, haul roads, noise walls, bike paths, etc. Because this area will be extensively altered, it has been included in the quantification of permanent impacts, and requires mitigation. Jurisdictional wetlands and waterways within the right-of-way bump-outs designated on the permit drawings for erosion and sediment control and/or stormwater management facilities are also authorized herein as permanent impacts. Jurisdictional resources beneath bridge decks are considered to be avoided or, in some cases, conversion impacts, except for a 25-foot wide swath under the bridge that will be needed for an equipment access road, which has been quantified in the permit as a temporary wetland/stream impact that is to be restored in place rather than offset through mitigation. The mitigation package provides sufficient compensatory mitigation to offset all the impacts that have been characterized as permanent. The Permittee may submit documentation showing impact areas that have been successfully avoided or reduced and, if approved, may deduct those amounts from the permitted impacts that have to be mitigated. Should the need for authorization of any additional jurisdictional wetlands and waterways impacts be identified as the design and construction progresses, the Permittee shall request a Permit Modification for the additional impacts. Any request for authorization of additional jurisdictional wetlands and waterways impacts not authorized herein, shall be accompanied by documentation to demonstrate that there is no practicable alternative, and therefore, the additional impacts are necessary and unavoidable.
18. Culverts conveying the stream base flow will be depressed a minimum of one foot below the invert of the stream so that a natural substrate will accumulate in the culvert. The Permittee shall design culverts to address the specific geomorphic characteristics of the stream to avoid downstream scour and channel

EFFECTIVE DATE: June 23, 2006

- h. The bridge over Gum Springs Tributary and Paint Branch mainstem shall be constructed such that the PGL at centerline Station 742+00 and the PGL at centerline Station 749+00 are 43 feet and 38 feet, respectively, above the elevation of the floodplain floor immediately below. The bridge shall be approximately 1280 feet long and, utilizing retaining walls, shall result in no permanent fill within the limits of the 100-year floodplain, as shown on the permit drawings, no permanent fill in wetland 3M, and no permanent fill in the channel of the tributary located to the rear of the properties on Creek Side Drive.
  - i. The bridge over Little Paint Branch shall be constructed such that the PGL at centerline Station 880+00 is 40 feet above the elevation of the floodplain floor immediately below, shall be approximately 530 feet long, and shall result in no permanent fill within 30 feet of the top of any streambank.
20. There shall be no grubbing of vegetation that grows beneath the proposed bridges over Rock Creek, North Branch Rock Creek, Northwest Branch, Good Hope Tributary, Gum Springs Tributary, Paint Branch Mainstem, or Little Paint Branch except, in consultation with the Administration, the minimum needed to construct project components such as foundations, haul roads, slope protection and utilities.
21. If riprap is determined necessary on the floodplain floor under any bridges, the riprap will be buried with material that is easily traversable by wildlife, preferably soil. Likewise, the use of slope protection under bridges will be minimized to retain as much of the natural terrain as possible for wildlife movement, and to minimize the disturbance of earthwork in the vicinity of streams.
22. If riprap is needed for energy dissipation at either end of a stream culvert, it shall be buried below the invert of the stream, so as not to impede fish passage during low flows.
23. Prior to placing fill in the following areas, the Permittee shall evaluate, and the Administration shall approve, whether it is practicable to avoid stream channels (or, to relocate, if it is not possible to avoid) in the following areas where streams are expected to be impacted by the highway construction:
  - Ramp B;
  - Station 200-216 Right (Plate 2);
  - Station 438-446 Left (Plate 15);
  - Station 624 to 624 Left (the upper 1000 feet of Notley Road Tributary on Plate 24); and
  - NB I-95 Station 955-961 Right (Plate 39).

As part of evaluating these streams, consideration shall be given as to whether a relocated channel will receive sufficient overland flow or groundwater contribution to sustain a stream ecosystem. Prior to any stream relocation, plans shall be submitted to the Administration for review and approval.

24. Although this authorization approves the discharge of fill in wetland 3C located south of the Montgomery County Department of Public Works and Transportation (DPWT) maintenance depot (Station 673), the Permittee shall design and construct measures to maintain groundwater seepage at this location.
25. The new in-stream sediment basin that is being provided immediately upstream of the I-95 interchange to replace the existing facility will require a Dam Safety Permit from the Administration. This sediment basin shall be constructed so that most of the pond is situated to one side of the current location of the stream channel. The objective is to facilitate relocation of the stream around the basin at some point in the future, by others, when it is no longer needed. This basin shall be functional before the 35-foot high dam (in the southwest quadrant of the I-95 interchange) is modified.
26. The limit of encroachment into Aitcheson Bog (wetland 8C) shall be no closer than is shown on Plates 33 and 36 of the permit drawings. The limit of fill shall be accomplished either by using a retaining wall (as shown) or alternative measure that has been reviewed and approved by the Administration. Special precautions shall be undertaken to control erosion during any modification of the 35-foot high earthen dam in the southwest quadrant of the I-95 interchange, including ensuring that the sediment behind the dewatered dam is contained so as not to exceed the State's water quality standards during storm events.
27. Using a permanent deed restriction or conservation easement, the Permittee shall protect approximately 19.9 acres encompassing wetland 6J and a 100-foot upland buffer around wetland 6J, north of the ICC, in order to



32. The runoff from the first 1-inch of runoff from the existing stormwater management facility at the DPWT maintenance depot shall be redirected to the Northwest Branch watershed.
33. Infiltration practices (structural and non-structural) shall be employed in the Paint Branch watershed to treat the computed recharge volume. The design of infiltration structures shall be based on field infiltration tests rather than sieve analysis. To preclude sediment from entering the infiltration structures during construction, they shall either be sealed with plastic, or their construction deferred until the surrounding slopes are stabilized. Infiltration basins shall not be used as sediment traps. Infiltration basins shall not be put into service until all of the contributing drainage area is stabilized. In the Paint Branch watershed, infiltration structures will be constructed at the base of the highway slopes adjacent to the eastbound lanes between the Good Hope and Gum Springs bridges. Infiltration in the Paint Branch watershed may also be supplemented using bottomless inlets and/or manholes.
34. Except as shown on the permit drawings, no stormwater management pond or erosion and sediment control basin shall be constructed in any wetland. Where the drawings show a right-of-way bump-out for a stormwater management pond or erosion and sediment control basin in the vicinity of a stream, the pond or basin shall be constructed in a manner that does not impound the stream (except at the location authorized by Condition #25 above if necessary, and at Stream WMM at Southbound I-95, Station 900 Left). For any stormwater management pond constructed in the vicinity of a stream, the pond shall be located a sufficient distance from the stream to maintain a 15-foot wide cleared area beyond the toe of any berms surrounding the pond, plus an additional 30-foot wide, or larger, vegetated buffer along the stream. Stormwater pond outfalls may be constructed across the 30-foot vegetated buffer area.

#### **Erosion and Sediment Control**

The Permittee has offered, and the Administration has accepted, the following special condition (#35) to ensure that the project will not result in significant degradation of regulated resources as a result of construction activities. The measures contained in this permit condition shall be implemented by the Permittee, and shall be monitored for compliance by the contractor's quality assurance staff, the Independent Environmental Monitor, and the Permittee's project management staff during the construction of the project. Any material changes to items a - f in Special Condition #35, or failure to implement these requirements, will be grounds for modifying, suspending, or revoking this permit.

35. SHA shall utilize their new erosion and sediment control program on this project. The new program incorporates the following features:
  - a. An incentive/disincentive program to encourage compliance with the erosion and sediment control plan. This program will involve random, surprise inspections of the contractor's erosion and sediment control devices. Quarterly incentives will be provided for maintaining an average rating of 85 with no D or F ratings.
  - b. A rating of D or F will result in shutdown of all earthwork activities except erosion and sediment control maintenance, and will result in assessment of a financial penalty on the contractor.
  - c. The contractor will have 72 hours to upgrade sediment controls if a C rating is reported. Failure to upgrade to a B rating within 72 hours will result in a D rating, requiring shutdown of all earthwork activities except erosion and sediment control maintenance.
  - d. Ratings of C and lower will be reported to the principals of the contracting company. Two F ratings will result in dismissal of the contractor's erosion and sediment control manager and superintendent for a period of 6 months. Both positions must be filled by people who have received SHA certification in erosion and sediment control.
  - e. SHA will contribute to the cost of maintaining erosion and sediment control measures in the case of a "severe storm event" that exceeds a designated rainfall threshold.
  - f. The erosion and sediment control measures will be monitored and maintained during weekends and holidays.

45. Temporary stream crossings are hereby authorized, within the limit of disturbance shown on the permit drawings, for the purpose of constructing either an access road for construction equipment or a haul road. There shall be no more than one temporary stream crossing constructed on any stream at each bridge or culvert location. At the following streams, temporary stream crossings associated with this authorization shall be accomplished using bridges that completely span the stream (i.e. no piers in streams), and no other type of temporary crossing shall be permitted:

- Rock Creek, Station 240;
- North Branch Rock Creek, Station 319;
- Tributary to North Branch Rock Creek, Station 328;
- Northwest Branch, all three crossings, excluding the channel at Station 599;
- Good Hope Tributary, Station 690;
- Gum Springs Tributary, Station 740;
- Paint Branch Mainstem, Station 748; and
- Little Paint Branch, Station 880.

In the floodplain of Northwest Branch, between Stations 593 and 601, there are numerous shallow channels that convey water only when the floodplain is inundated. These channels shall be piped under any temporary road that might be constructed across this floodplain.

46. To reduce fish mortality, the Permittee shall collect fish prior to dewatering work areas, and release the fish downstream.
47. No stockpiling or storage of equipment, materials, or structural steel; no staging areas; and no installation of ancillary facilities such as concrete or asphalt plants or construction trailers shall be permitted within any stream, wetland, State-regulated wetland buffer, or floodplain. No construction materials, aggregates, or earth shall be stockpiled or stored in a manner that would affect wetlands or streams. All stockpiles shall be included in erosion and sediment control plans submitted to the Administration for review and approval.
48. No concrete trucks shall be washed off in a manner that would allow the cement-laden wash water to enter a stream or wetland.
49. In order to preclude accidental encroachment into wetlands that are beyond the permitted limit of disturbance (LOD), orange plastic fencing and signage shall be installed along the LOD adjacent to the wetlands. The LOD shall be established as per Special Condition #17. The installation of fencing shall be accomplished immediately after stakeout of the LOD and prior to installation of erosion and sediment controls. The following specific locations will require orange plastic fencing (station numbers are approximate, but the entire edge of the wetland that is adjacent to the LOD shall be protected):

- Station 105 Right, wetland RP7;
- Station 113 Left, wetland 1AF;
- Ramp F Station 803 Right, wetland 1AG;
- Station 152 Left and Right, wetland 1D;
- Station 173 Left, wetland 1FA;
- Station 175 Right, wetland 1H;
- Station 277 Left, wetland 1MD;
- Station 277 Right, wetland 1Q;
- Station 283 Left, wetland 1MDA;
- MD 115 Station 15 Right, wetland 1MDA;
- Station 313 Right, wetland 1T;
- Station 320 Left, wetland 1W;
- Station 327 Left, wetland 1ZA;
- Station 328 Right, wetland 1Z;
- Station 361 to 366 Left, wetland 1DD;

- Wash pond wetlands – 1:1 (1 acre of mitigation for every 1 acre impacted) with emergent, scrub-shrub, or forested wetlands;
- Emergent wetlands – 1:1 (1 acre of mitigation for every 1 acre impacted);
- Scrub-shrub wetlands – 2:1 (2 acres of mitigation for every 1 acre impacted); and
- Forested wetlands – 2:1 (2 acres of mitigation for every 1 acre impacted).

54. Within 180 days of permit issuance, the Permittee shall submit a Compensatory Mitigation and Monitoring Plan (CMMP) for Administration and Corps approval which shall designate a schedule for design and construction of the approved compensatory mitigation sites. The CMMP shall discuss the design goals and performance standards for the compensatory mitigation wetland or stream sites, including proposed ecological functions; opportunities to re-connect streams to their floodplains or to expand floodplains; proposed vegetative community and areal coverage; proposed manipulations of earthwork; proposed sources of hydrology, including consecutive days and depth of saturation; proposed soil amendments; proposed buffers; proposed habitat features; control of browsing by deer, voles, and beaver; control of invasive species; permanent restriction of access by recreational vehicles; signage; and proposed construction access points. The Administration and the Corps shall be provided final design plans for each of the approved compensatory mitigation sites for review and approval prior to commencing construction. With the exception of post-construction monitoring, all compensatory mitigation shall be completed by the time that highway construction is complete.
55. Wetland mitigation projects shall be monitored in accordance with the most recent guidelines developed by the Permittee with the Corps and Administration, and the CMMP developed in accordance with Condition #54. The Permittee shall monitor the wetland creation and stream restoration sites for a period of five consecutive growing seasons, and submit monitoring reports annually to the Administration and the Corps. The reports shall contain the information required by the “New SHA Mitigation Monitoring Protocols for Wetland and Stream Restoration” (effective 2006 monitoring season). Year #1 of the 5-year monitoring period shall commence with the first spring season following completion of construction and planting of the wetland mitigation site. If wetland creation or restoration is not considered successful by the Administration and the Corps within five years, the reasons for the failure shall be determined by the Permittee and any areas not successfully established shall be remediated, or the Permittee shall locate an alternative site, in conjunction with the Administration and the Corps, and construct the required replacement wetland acreage. Monitoring reports shall be submitted annually to the Administration and the Corps by December 31 of each year, for five years. If there is any doubt that adequate hydrology has been established to satisfy the hydrology performance criterion, the Administration and the Corps may direct the installation of groundwater monitoring wells. If any remediation was needed during the initial five-year monitoring period, the Administration and the Corps may require that monitoring and reporting be extended as much as five additional years beyond the date of the last remediation, depending upon the nature of the remediation.
56. With the exception of mitigation constructed on Maryland National Capital Park and Planning Commission (MNCPPC) property, wetland mitigation sites shall be protected in perpetuity with a conservation easement or deed restriction. The conservation easement or deed restriction shall be in the form of a covenant running with the land and recorded with the deed, conveyance, or transfer. All prospective purchasers of all, or portions, of the wetland mitigation site shall receive notice of the conservation easement or deed restriction, and the prohibitions shall be referred to in every deed, conveyance, or transfer of all or portions of the mitigation site. The covenant shall include prohibitions against cutting, mowing, clearing, grading, draining, construction of roads or structures, dumping, filling, and erecting billboards or commercial signs, on the mitigation site as displayed on the plat map which describes the property being conveyed, granted, or transferred except as required to establish and maintain the mitigation site as authorized by the Administration and the Corps or other Federal agency having authority to do so. The draft conservation easement or deed restriction shall be submitted to the Administration for review and approval prior to final recordation in the land records of the appropriate county. Following review and approval of the draft conservation easement or deed restriction, the Permittee shall record the final easement or restriction, and shall submit a copy

**NONTIDAL WETLANDS AND WATERWAYS PERMIT  
NUMBER 04-NT-0408/200560011**

**BEST MANAGEMENT PRACTICES FOR WORKING IN  
NONTIDAL WETLANDS, WETLAND BUFFERS,  
WATERWAYS, AND 100-YEAR FLOODPLAINS**

- 1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
- 4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
- 6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
- 7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (*Lolium multiflorum*), Millet (*Setaria italica*), Barley (*Hordeum sp.*), Oats (*Uniola sp.*), and/or Rye (*Secale cereale*). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
- 8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
- 9) To protect aquatic species, in-stream work is prohibited during the periods indicated in the Nontidal Wetlands and Waterways Permit and the Water Quality Certification for the project.
- 10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
- 11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.

**PAGE 2 OF 4 WQC**

This water quality certification is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments and the Environment Article, Sections 9-313 - 9-323, inclusive, Annotated Code of Maryland and Code of Maryland Regulations 26.08.02.10. A copy of this required certification has been sent to the Corps of Engineers. This certification does not relieve the State Highway Administration and the Maryland Transportation Authority (Permittee) of responsibility for obtaining any other approvals, licenses or permits in accordance with federal, State, or local requirements and does not authorize commencement of the proposed project. The Maryland Department of the Environment (Department or MDE) has determined from a review of the plans that the discharges to federally-regulated waters and wetlands described above will not violate Maryland's water quality standards, provided that the following conditions are satisfied.

The certification holder shall comply with the conditions listed on the following pages.

**GENERAL CONDITIONS**

1. The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02. The applicant is to notify this Department ten (10) days prior to commencing work. Verbal notification is to be followed by written notice within ten (10) days.
2. The proposed project shall be constructed in accordance with the plan and its revisions.
3. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.
4. The certification holder shall notify the Water Management Administration, in writing, upon transferring property ownership or responsibility for compliance with these conditions to another person. The new owner/operator shall request, in writing, transfer of this water quality certification to his/her name.
5. The certification holder shall allow the Maryland Department of the Environment or its representative to inspect the project area at reasonable times and to inspect records regarding this project.

**SPECIAL CONDITIONS**

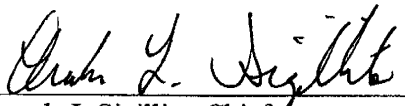
6. The conditions of Nontidal Wetlands and Waterways Permit # 04-NT-0408/200560011 (Permit) are incorporated, by reference, into this Water Quality Certification.
7. The disturbance to the bottom of waterways and sediment transport into State waters shall be minimized. The Permittee shall obtain and certify compliance with grading and sediment control plans which have been approved by the Maryland Department of the Environment, Water Management Administration.
8. To protect important aquatic resources, activities within the following stream channels are prohibited during the time periods indicated as determined by the use classification of the stream (COMAR 26.08.02.08) and the special circumstances as indicated:

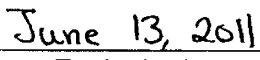
**PAGE 4 OF 4 WQC**

13. All compensatory mitigation projects located within the Paint Branch watershed shall be completed prior to, or concurrent with highway construction within this watershed.
14. The Permittee has agreed to complete the following ES projects prior to highway construction in the Paint Branch Watershed: PB 122/123, PB 124/125, PB 126/127, and PB 128/129. The remaining ES projects listed in Special Condition #12 shall be completed prior to, or concurrent with highway construction in this watershed.

Failure to comply with these conditions shall constitute reason for suspension or revocation of the Water Quality Certification and legal proceedings may be instituted against the certification holder in accordance with the Annotated Code of Maryland. In granting this certification, the Department reserves the right to inspect the operations and records regarding this project at anytime.

**CERTIFICATION APPROVED**

  
\_\_\_\_\_  
Amanda L Sigillito, Chief  
Nontidal Wetlands and Waterways Division

  
\_\_\_\_\_  
Expiration Date

cc: WMA Inspection w/file  
U.S. Army Corps of Engineers, Transportation Program