



MCPB
Item # 11
2-19-09

MEMORANDUM

DATE: February 19, 2009

TO: Montgomery County Planning Board

VIA: Mark Pfefferle, Acting Chief, Environmental Division *MP*
Stephen D. Federline, Master Planner/Supervisor, *SD*
Environmental Planning Division

FROM: Andrea Stone, Senior Planner and *AS/AMS*
Candy Bunnag, Planner Coordinator, Environmental Planning Division

SUBJECT: Environmental Review for New Hampshire Avenue/ICC Interchange and Cape May Road Cul-de-sac in Upper Paint Branch Special Protection Area

RECOMMENDATIONS

Transmit the following recommendations to the State Highway Administration (SHA), and the Maryland Department of the Environment (MDE).

Staff supports the phasing of construction in the New Hampshire Avenue interchange and Cape May cul-de-sac area to facilitate early bridge work, conditioned on compliance with the recommendations below. The phasing of construction will allow the area to be stabilized before the remaining drainage area to Good Hope tributary or the remainder of Upper Paint Branch watershed is disturbed, and will allow earth moving operations to pass below New Hampshire Avenue traffic which will be on the newly constructed bridge above. Staff recommendations are summarized below:

1. Final plans for the Cape May cul-de-sac (including sidewalk re-construction) should show no net gain of impervious surfaces within the Special Protection Area (SPA), consistent with the Board's action on July 31, 2008 requiring County Department of Transportation (DOT) to comply with Environmental Overlay Zone requirements for the existing sidewalk on this county-owned road.
2. Final plans for the Cape May cul-de-sac should include the re-establishment of a pedestrian connection between Cape May Road and New Hampshire Avenue that was recently installed by Montgomery County DOT due to strong safety concerns raised by

the community. During construction, provisions should be made to maintain safe pedestrian passage to New Hampshire Avenue.

3. The re-established Cape May Road sidewalk shall be constructed of porous concrete or other in-kind material, consistent with the existing sidewalk.
4. Staff recommends that the County Department of Environmental Protection (DEP), in coordination with the Parks Department and SHA, should establish a water quality monitoring station within the tributary to Good Hope downstream of the Intercounty Connector (ICC) Limit of Disturbance (LOD). DEP would manage the station and the collection of water samples through an existing water quality monitoring contract, but funding would have to come from SHA.
5. Impacts to interior forest habitat and their buffers should be avoided during construction, when possible, from April and August as stated in the Record of Decision (ROD) Commitment Number 93 to minimize impacts on forest interior dwelling bird species.
6. Before any land disturbance for the early bridge work at New Hampshire Avenue occurs, DEP and SHA should agree to a schedule and format for water quality monitoring data to be submitted to DEP for assessing attainment with the SPA Performance Goals established in the Mandatory Referral for Upper Paint Branch SPA.
7. Integrate sediment and erosion control concept as outlined in January 22, 2009 letter from Mark Etheridge, County Department of Permitting Services (DPS) to Dan O'Leary, ICC Team, Water/SWM Lead Engineer into final plans (see Attachment 1). County DPS shall have an additional opportunity for comment to SHA and MDE if significant changes to the concept are proposed at any later point in the regulatory review and approval process.

PURPOSE

The SHA has identified early bridge work and grading in the future New Hampshire Avenue interchange area as a critical path construction activity for the ICC. The early bridge work has a complex design including erosion and sediment control, grading, maintenance of traffic on New Hampshire Ave, utility relocation, bridge construction, and termination of Cape May Road in a cul-de-sac. These activities will require construction to begin in spring 2009 in order to maintain the overall project schedule. To facilitate the early bridge work, roughly 4.5 acres of disturbance within the Upper Paint Branch Special Protection Area is necessary, and the work would be conducted prior to completion of the final stormwater management, sediment control, and road design plans for the entire section of the ICC within the Upper Paint Branch SPA.

Therefore, SHA has requested that the Planning Board conduct an environmental review of the New Hampshire Avenue early bridge work area within the SPA, extending eastward approximately 380 feet into the SPA. This environmental review is to be held separately and ahead of the major portion of the ICC within this SPA and covers only the clearing and grading activities needed for design-build. A second and final environmental review anticipated in summer 2009 will cover all remaining design and mitigation elements including stormwater

management, sediment and erosion control (beyond the interchange area), and detailed roadway design for the upper Paint Branch SPA. The RFP plate of the New Hampshire interchange and Cape May cul-de-sac is shown below in Figure 1.

The purpose of this memorandum is:

1. Provide public information regarding the States' design concept for protecting environmental resources within the New Hampshire Avenue Interchange area of the Upper Paint Branch SPA.
2. Allow for public and Planning Board review and comment to the State Highway Administration and the Maryland Department of the Environment (MDE) to influence details of the early bridge work design prior to MDE approval of the erosion and sediment control plans for the early bridge work and Cape May Road cul-de-sac.

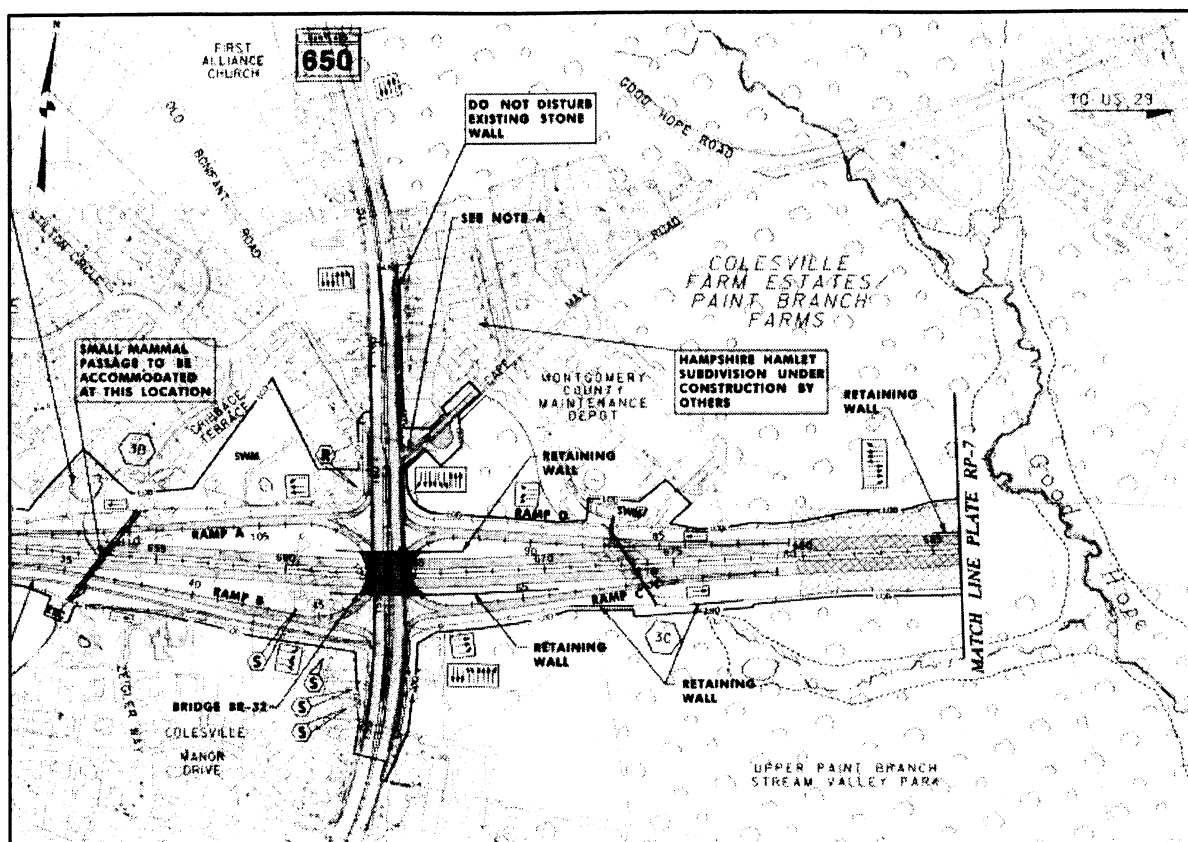


Figure 1

UPDATE OF EVENTS SINCE 1/29/09 PLANNING BOARD ROUNDTABLE DISCUSSION

At the Planning Board roundtable discussion on January 29, 2009, the ICC Status Report gave an update on the ICC environmental review for Upper Rock Creek SPA. The discussion focused on improvements in coordination between County and State review agencies for the SPA segments of the ICC to allow for stormwater management and erosion and sediment control facilities that are typically used on private and County projects to be incorporated into the plans. The Planning Board identified specific action items that should occur:

- Planning Board letter possibly cosigned by the County Executive to the Secretary of MDE. At the time of this memorandum, a letter is being drafted by staff and will be circulated to the Chairman and Executive staff. Staff will update the Planning Board at the hearing.
- Invitation extended to DPS and DEP to attend the Interagency Working Group (IAWG) meetings. The February 4, 2009 IAWG meeting included a presentation by MD200 (the selected Design Builder for Contract B) to discuss stormwater management concepts for Upper Paint Branch SPA portion of the project. Staff has also invited the MDE Plan Review Chief for stormwater management to the meeting.
- The SHA Brown Trout Working Group meetings have been reconvened. This is a multi-agency group with members from federal, state and local agencies with particular interest in the Paint Branch watershed. This is the group that helped guide the stormwater management design concept for the ICC through the watershed. It is staff's understanding that discussions will focus on water quality for environmental stewardship and mitigation projects in the Upper Paint Branch SPA.

ICC CONTRACT REQUIREMENTS FOR UPPER PAINT BRANCH SPA

SHA has included in the contract several Special Provisions to protect the Upper Paint Branch watershed during and after construction.

- The construction specifications for the Upper Paint Branch SPA currently do not allow clearing and grading occur before the final erosion and sediment control and stormwater management design has been approved by the MDE. This is more restrictive than the Upper Rock Creek SPA portion because that contractor was not contractually prohibited from working in that SPA until all approvals were in place. In that case, a clearing and grading approval was secured prior to formal approval of roadway and stormwater management plans.
- The Design-Builder must submit a Preliminary Stormwater Management Report and an Erosion and Sediment Control (ESC) Concept Plan for the Upper Paint Branch SPA as part of the initial construction plan submission.
- The design submittal for roadway and drainage plans in the Upper Paint Branch SPA will include designs for the entire SPA as one complete submission, and will include all information necessary for approval of the stormwater management and erosion and sediment control by MDE, and must be approved for Erosion and Sediment Control and Stormwater Management and in compliance with the Nontidal Wetlands and Waterways Permit issued by MDE prior to beginning construction.

- Drainage from the mainline highpoint approximately 1,000 feet east of the tributary to Good Hope will be carried west to discharge into Northwest Branch, west of New Hampshire Avenue. Flows leaving the MCDPWT (now, MCDOT) Maintenance Depot from storms up to and including the 1-year return period storm will also be carried away from the Good Hope tributary and discharged to Northwest Branch. Discharged roadway runoff from east of the highpoint will drain through stormwater management practices and be outlet to the Paint Branch mainstem below Gum Springs and at the ICC bridge (from the east only). No ICC roadway pavement drainage is allowed to enter Good Hope or Gum Springs tributaries as recommended by the Brown Trout Work Group. The purpose for diverting highway runoff, and runoff up to the 1-year storm event from the MCDOT Depot, to Northwest Branch is to prohibit highway runoff from entering Good Hope and Gum Springs tributaries, and to protect these streams from thermal impacts. The stormwater management criteria for highway drainage entering Paint Branch is crafted to maximize infiltration and cooling prior to discharge at a point where significant baseflow already exists.
- The pedestrian connection must be re-established from the proposed Cape May Road cul-de-sac to New Hampshire Avenue.

CONSTRUCTION SCHEDULE

The first phase of construction will be maintenance of traffic and utility relocation along New Hampshire Avenue. Plans for this phase are expected in March and clearing for these activities is expected in April.

SHA expects submission of final stormwater management and erosion and sediment control plans in May or early June 2009. Clearing and grading activities are expected to begin in June 2009 after MDE has issued the permits. Staff will present a review to the Planning Board when final plans have been submitted.

ENVIRONMENTAL FEATURES IN THE ICC/650 INTERCHANGE AREA

SPA Environmental Buffers

Under existing conditions, drainage within the proposed LOD flows to a tributary of Good Hope. The area is outside the 100-year floodplain, slopes are less than 15 percent, and soils have low erosion hazard potential. There are no SPA environmental buffers for wetlands or streams within the proposed early bridge work LOD.

The area to be cleared is within the 300 foot buffer of interior forest. Less than 0.1 acre of interior forest is within the LOD, and little or no impact is expected by the clearing in the New Hampshire Avenue interchange area. Interior forest is potential habitat for Forest Interior Dwelling Species (FIDS) of birds. However, previous surveys of wildlife by the County in the interchange area did not find FIDS in this location. According to the Record of Decision Commitment Number 93, impacts to interior forest habitat and their buffers should be avoided during construction, when possible, from April to August, which is the breeding season for most forest interior dwelling species (FIDS). The Contract RFP states that “The Design Builder

should make every effort to avoid clearing operation in interior forest habitat, if possible, from April 1 to August 31 of any year.”

The area is adjacent to parkland. No impacts are proposed to the adjacent parkland. It should be noted that the ROW for the Cape May Road cul-de-sac was created from parkland. The transfer of this park property as ICC ROW was specifically set and approved by the Planning Board on February 15, 2007 and the full Commission on March 21, 2007.

Imperviousness

The Upper Paint Branch SPA has an Environmental Overlay Zone that limits impervious surfaces for all development projects (private and public) that are subject to the County zoning ordinance. This is different than the Upper Rock Creek SPA Environmental Overlay Zone, which has a specific imperviousness limit only for private subdivisions that are served by community sewer.

Given that the ICC is a major highway located within the SPA, this project will not meet the Upper Paint Branch SPA Environmental Overlay Zone imperviousness limit. In addition, because of its ROW location, the project will also not be able to meet the SPA goal of avoiding or minimizing impacts to environmental buffers. The avoidance and minimization measures for this project are defined by state and federal environmental buffer definitions rather than the more inclusive County definition. Not being able to meet these two components of a typical SPA water quality plan is contrary to projects that are subject to the SPA law and Upper Paint Branch SPA Environmental Overlay Zone. Therefore, there is a higher level of reliance on engineered stormwater management and sediment and erosion control measures to provide equivalent protection for the aquatic resources as compared to approved SPA water quality plans for projects that do meet these goals.

A portion of the Cape May Road will be removed, and a cul-de-sac constructed in its place. The design-builder is required to re-establish the pedestrian connection between Cape May Road and New Hampshire Avenue. This pedestrian connection was recently installed by Montgomery County Department of Transportation due to strong safety concerns raised by the community. The current SHA concept plans do not show the sidewalk. Staff recommends that a safe pedestrian connection be maintained during construction.

Based on SHA’s narrative (but not shown on conceptual plans), the cul-de-sac will have approximately 5,170 square feet of new impervious area, and 4,265 square feet of existing pavement will be removed, leaving a net increase of 905 square feet. Staff has recommended to SHA that there should be a no net gain of impervious surfaces for the Cape May Road improvement (including sidewalk re-construction). This is consistent with the Board’s action on July 31, 2008 requiring County Department of Transportation (DOT) to comply with Environmental Overlay Zone requirements for the existing sidewalk on this county-owned road.

The Planning Board had reviewed Montgomery County Department of Transportation’s SPA water quality plan and mandatory referral for the new sidewalk construction along the south side of Cape May Road and Good Hope Road on July 31, 2008 (Mandatory Referral No. 04816-DPW&T-1). The Board determined that the sidewalk was new construction (not reconstruction)

and should meet the 8 percent imperviousness limit of the Overlay Zone. To achieve this limit, the Board placed a condition on the water quality plan approval that requires DOT to *remove 10,453 square feet of impervious surfaces in the SPA*. Since that review, DOT has completed the sidewalk and is in the process of preparing a project to remove existing impervious surfaces within DOT ROW in the SPA.

No mainline ICC pavement is included in the early bridge work at New Hampshire Avenue. Calculations for impervious area of the ICC mainline will be conducted as part of design-build activities and have not yet been submitted for staff review. Table IV-63 in the ICC FEIS includes an estimate that the ICC mainline will include 39.2 acres of impervious surface within the SPA.

Forest Conservation

As this is a State project, it is not subject to County Forest Conservation Law, and the County does not require any mitigation for forest impacts. Mitigation requirements fall under the jurisdiction of the State Department of Natural Resources.

Erosion and Sediment Control

SHA provided conceptual erosion and sediment control plans to local staff including DPS in November 2008. The comments DPS returned to SHA by e-mail are included as Attachment 1. Detailed sediment control plans are expected in March. The strategy for erosion and sediment control includes redundant measures consistent with SPA requirements. Super silt fence and an earthen berm will be used adjacent to the LOD. Runoff will be collected in a sediment trap, then pumped to a basin next to New Hampshire Avenue and discharged to the Northwest Branch watershed. However, without the pump any outflow would drain to the Depot Tributary to Good Hope. The erosion and sediment control plan would be fully functional even without the use of the pump. The use of the pump meets the SPA goal of the use of redundant measures. DPS has agreed that the concept plans meet the general intent of redundancy for the roadwork in the SPA. Clearing and grading for the installation of erosion and sediment control measures is expected to begin in June 2009.

In keeping with the ROD commitment to coordinate with DPS, staff recommends that County DPS have an additional opportunity for comment to SHA and MDE if significant changes to the concept are proposed at any later point in the regulatory review and approval process.

Stormwater Management

Runoff for some storm flow events from the interchange area, including the Cape May Road cul-de-sac, are required to drain to the Northwest Branch away from the Good Hope tributary and the Upper Paint Branch watershed. The sediment control concept plan is consistent with this approach. Details for the stormwater management strategy will be established as the design continues consistent with this concept. Drainage and grading plans for final stormwater management in the interchange area are expected to be submitted for review in June 2009. SHA,

MDE, M-NCPPC, and DPS staffs will continue to coordinate in the review process of these designs. Staff will present a review to the Planning Board when final plans have been submitted.

Water Quality Monitoring

The State Water Use Designation for the area within the proposed LOD is Use III/III-P, Natural Trout Waters. As a State and Federal project, the ICC is not required to have a SPA Water Quality Plan. For the water quality monitoring program within County SPAs, the ICC Team has prepared a document "*Montgomery County Special Protection Areas and the ICC*" to outline the 10 SPA Performance Goals and describe how the project intends to meet these goals. An excerpt of this document is included in Attachment 2.

There are two water quality monitoring programs in place for the ICC. The ICC Team has been collecting baseline water quality data since 2004 and continues this monitoring. In addition, the design builder is required to monitor water quality during construction at every perennial stream crossing, upstream and downstream of the LOD. The nearest perennial stream crossing to the interchange area is the Good Hope stream crossing over 2,000 feet from the proposed LOD. While the Good Hope stream will most likely not be affected by the construction at the interchange, the tributary to Good Hope below the maintenance facility (Depot Trib) will receive any runoff from this area. DEP has identified this tributary as significant for water quality in Good Hope, providing groundwater recharge and thermal cooling. From 1996 through 2001, the DEP maintained water quality monitoring stations at the outfall from the maintenance facility and on the Upper Good Hope mainstem downstream of the tributary within which directly received runoff from the maintenance facility. Staff recommends that the Upper Good Hope monitoring station be re-established downstream of the ICC limit of disturbance with the coordination between the Parks Department and DEP with funding by the SHA.

PROCESS BACKGROUND

The ICC traverses through two Special Protection Areas: Upper Rock Creek and Upper Paint Branch. The ICC through the Upper Paint Branch SPA (from New Hampshire Avenue east to Old Columbia Pike) is approximately 13,000 linear feet.

As a State project, the ICC is subject to Federal and State laws and regulations, but not to County regulatory requirements. In 2007, State Highway Administration (SHA) and the local SPA review agencies (M-NCPPC, County Department of Permitting Services (DPS), and Department of Environmental Protection (DEP)), agreed to an alternative process for review of environmental and water resource protection measures for the ICC within the two SPAs. The details of this process were included in the ICC Status Report #5 presented to the Planning Board on February 2, 2007 and is included in Attachment 3.

The role of the Planning Board and the Executive agencies on the ICC is advisory - not regulatory. The ICC review process allows for staff of M-NCPPC, DPS, and DEP to review and comment to SHA directly on the plans as they are made available for review. It also allows the opportunity for County's SPA review agencies to provide timely comments as part of concept development for early consideration by SHA/ Design Builders and ultimately, by Maryland

Department of the Environment (MDE) and Maryland Department of Natural Resources (DNR), the two state agencies that have regulatory authority over the ICC.

The importance of the high quality natural resources found in upper Paint Branch watershed reaches back to the State's designation of the watershed in Montgomery County as the state's first Use III waters (natural trout waters). The County's extensive investments in protecting this resource started with the 1981 Eastern Montgomery County and has continued with many measures, including extensive park acquisition and an Environmental Overlay Zone with an 8% impervious limit on all new development (public and private) and prohibits highly polluting land uses. *A broader history of the extensive efforts which have been made to protect this unique resource are included in Attachment 4.*

In November 2002, the late Councilmember Marilyn Praisner formed the Upper Paint Branch Technical Workgroup. Its purpose was to identify on-going problems in the SPA and to formulate specific recommendations to solve these problems and provide adequate protection of the environmental resources of the watershed. It was co-chaired by County DEP and the Department of Parks, and included technical staff from county, state, and regional agencies, as well as representatives from environmental organizations, all with intimate knowledge of the Upper Paint Branch watershed. The workgroup's analysis and recommendations are found in the "Final Report of the Reconvened Upper Paint Branch Technical Work Group" (June 2006).

One of the 2006 work group's conclusions is directly pertinent to the overall ICC discussion and review:

"Road projects need to be recognized as a particular problem. Potential watershed impacts occur from construction processes, road runoff after construction, and from vehicles utilizing the roadways. There was consensus that full mitigation isn't possible. For example, there is no way to replace hydric soils that are displaced because they take years and years to develop; furthermore, road projects seem to alter the natural hydrology of streams, and stormwater management systems can only go so far toward replicating natural conditions. The ICC as currently planned will negatively impact the Paint Branch even if all mitigation and stewardship activities are carried out to their fullest extent."

These best professional judgments of Paint Branch's technical experts bear repeating today, even after alignments are fixed, all environmental reports have been approved, and construction continues since, as is commonly said, "the devil's in the details". The ultimate degree to which this conclusion becomes a reality will not be known for many years. How well this project will minimize environmental impacts will depend on how aggressively design professionals convert the concepts expressed in the environmental/ ROD commitments into "the best they can be" into reality on the ground. The designers, reviewers, and regulatory authorities must work cooperatively to provide the best of the best in mitigation/minimization in the final designs and construction to achieve the best results that can be achieved, given the reality of a major roadway traversing this sensitive ecosystem.

January 22, 2009

Mr. Daniel J. O'Leary
ICC Team Hydrology and Hydraulics Lead

Dan –

As I related to you at our meeting last week, I have looked at the email attachment plan you sent me on January 15, 2009 entitled "MD 650 Early Start Plan Phase II December 7, 2009". This plan shows the proposed sediment controls for general land disturbance associated with initial land grading for the ICC project in the Upper Paint Branch SPA, including grading under New Hampshire Avenue and construction of a cul-de-sac on Cape May Road.

A sediment trap, sized for the maximum drainage area, along with additional Super Silt Fence is acceptable as meeting the general approach for sediment control in the SPA. The trap must be designed to be the primary sediment control device. The proposed pumping scheme may be used, and can be considered to be a part of the sediment control redundancy, but the pumping must not be considered as a first order sediment control approach. Grading should proceed such that the surface runoff is directed west via gravity flow as quickly as practical. I understand that once the grades allow, all runoff from the disturbed area will drain west toward a trap in the Northwest Branch watershed.

The cul-de-sac is shown on the attachment as being protected via a double row of super silt fence and silt fence. I would agree that this also meets the general intent of redundancy of control for the roadwork. All areas of disturbance must drain to acceptable sediment control devices.

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Montgomery County Special Protection Areas and the Intercounty Connector

January 2007

Introduction

In 1995, by Executive Regulation 29-95, Montgomery County established requirements for development in certain areas of the County, termed "Special Protection Areas" (SPAs) (see Appendix A). Although the Executive Regulation applies directly to private and County developmental activities in SPAs, State and federal projects may become involved through the local planning agency, the Maryland-National Capitol Park and Planning Commission - Montgomery County (M-NCPPC-MC), and its Mandatory Referral process. The Montgomery County Department of Permitting Services (MCDPS) administers SPA requirements with respect to development and approval of Water Quality Plans, and M-NCPPC-MC is responsible for compliance with zoning overlays. During a typical development process in the SPA, the Montgomery County Department of Environmental Protection (MCDEP) provides applicants with environmental data to aid their understanding of the resources that may be the subject of the special protection and to customize strategies to protect those resources. SHA/MdTA relied upon MCDEP's data as well as data from Maryland Department of Natural Resources Fisheries and from other sources in preparing the environmental documents for the ICC.

The State Highway Administration (SHA) and the Maryland Transportation Authority (MdTA) or SHA/MdTA are jointly constructing the Intercounty Connector (ICC), a six lane roadway running from I-370 in the Gaithersburg section of Montgomery County to I-95 / US 1 in the Beltsville section of Prince Georges County. The ICC crosses two Montgomery County SPAs. One crossing comprises approximately 4,500 linear feet of roadway in the Upper Rock Creek SPA between Muncaster Mill Road (MD 115) and North Branch Rock Creek, and the second crossing comprises approximately 2.5 miles or roadway in Upper Paint Branch SPA between New Hampshire Avenue (MD 650) and the SPA boundary in the vicinity of Old Columbia Pike. See Appendix B, Figure II-13. The Lead Agencies on the ICC (SHA, MdTA, and the Federal Highway Administration (FHWA)) are committed to work with the local County and regional planning body to ensure that an environmentally sound Water Quality Plan is achieved for the project so that, if the ICC were a private development, the Plan would be approved through the County's SPA review process. Because the Lead Agencies are either State or Federal entities, the Maryland Department of the Environment (MDE) is authorized to review and approve the project pursuant to Title 4, Subtitle 2 of the Environment Article of the Annotated Code of Maryland, and Section 26.17.02 of the Code of Maryland Regulations (COMAR), pertaining to stormwater management (SWM), and Title 4, Subtitle 1 of the Environment Article of the Annotated Code of Maryland and COMAR 26.17.01 governing erosion and sediment control (ESC).

Pursuant to the process set forth in the National Environmental Policy Act (NEPA), SHA/MdTA has completed Natural Environment Technical Report (NETR) and Draft and Final Environmental Impact Statements (DEIS and FEIS). Development of the

Montgomery County Special Protection Areas and the ICC

NETR, DEIS and FEIS included baseline preconstruction monitoring and data collection, assessment of anticipated and potential future impacts, public input about the studies and alternatives being considered, compensatory mitigation to address anticipated impacts, and proposed Environmental Stewardship (ES) projects. ES activities are included in the project scope to improve existing cultural, community, and natural resources within the ICC study area, which have been impacted by past development.

In addition to commitments made in the FEIS, crossings of streams and impacts to aquatic life, wetlands, and streams must conform to the conditions of an MDE-issued Nontidal Wetlands and Waterways Permit (Permit No. 04-NT-0408/200560011) and an Individual Permit issued by the US Army Corps of Engineers (USACOE or the Corps) (Permit No. CENAB-OP-RMS 05-60011-1) based on the planning studies performed for the project to date. SWM and ESC plans developed for the project must meet MDE requirements at a minimum and be approved by MDE prior to any earth disturbing activities being undertaken on the project. SWM and ESC plans and an application for MDE approval will be developed during the definitive design stage of the project, once a Design-Builder has been selected and a Notice to Proceed has been granted.

This document reduces over 2000 references to the phrase "Special Protection Area" (SPA) found in the ICC FEIS published in January 2006, into a unique reference that will provide reviewers and interested parties with a level of comfort that the project demonstrably complies with the intent of Montgomery County SPA requirements. It is not the purpose of this document to identify every SPA reference in either the FEIS or the permits and describe them in detail. Instead, each of the ten SPA Performance Goals is listed below along with a short description evincing how the ICC meets each goal. The text includes references to where the reader may find information and the formal commitments. Appendices to this document comprise all pertinent references and cross references, namely SPA maps, Executive Regulations and Montgomery County Code provisions with respect to SPAs (Appendix A); text-referenced sections of the FEIS (Appendix B); text-referenced sections of the Request for Proposals (RFP) for ICC Contract A - From I-370 to Georgia Avenue (Appendix C); USACOE and MDE permits issued on June 13, 2006 and June 23, 2006 respectively (Appendix D); pertinent meeting minutes documenting agency coordination in SPAs (Appendix E); ICC FEIS (Appendix F - (2) in CD Format); and ICC Natural Environment Technical Report (Appendix F - (1) in CD Format).

Special Protection Area Performance Goals

(See Montgomery County Executive Regulation No. 29-95)

1. Stream / Aquatic Life Habitat Protection

The ICC includes many features that provide general stream and aquatic life protection. SWM requirements for the project follow the MDE stormwater Design manual procedures and exceed them in several respects. SHA/MdTA's commitment to providing enhanced SWM is found in FEIS section VII.B.5 - Stormwater Management Features (page VII-25), and these are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 - Design Requirements, PS 303 - Drainage Performance Specification, subsection 3.7. In FEIS Section VII.B.5 (page VII-25) both the overall SWM requirements are detailed as well as what is different and more restrictive in the SPA. The anticipated effects of the ICC on stream / aquatic life habitat are explained in FEIS Section IV.F.5 - Surface Water Resources and Section IV.F.6 - Aquatic Biota (pages IV-151 and IV-195, respectively). Effects of the ICC on Montgomery County Unique and Sensitive Areas (primarily SPAs) may be found in FEIS Section IV.F.11 (page IV-299). An analysis of anticipated secondary and cumulative impacts resulting from the ICC on the environment may be found in FEIS Section IV.K.8 (page IV-415).

To comply with NEPA and gain approval from FHWA, SHA/MdTA prepared a Compensatory Mitigation (CM) package for anticipated environmental impacts resulting from the ICC. A description of the CM proposed and accepted for the ICC may be found in FEIS Section VII.C.3 - Environmental Measures and Conceptual Mitigation (page VII-52). Within this section is a table listing each Compensatory Mitigation site, the watershed in which the site exists, the restoration objectives (e.g., restoration of X linear feet of stream), and a description of the mitigation concept.

SHA/MdTA has committed to constructing Environmental Stewardship (ES) projects that exceed the mitigation required under law. These ES projects are classified as either community/cultural or natural/environmental. The natural/environmental projects are intended to address existing problems in the natural environment that are not related to or caused by the ICC. Two examples of these projects are stormwater retrofits of existing, developed areas, and stream stabilization and restoration projects upstream of the ICC. Descriptions, concepts, and maps for each ES project may be found in FEIS Section VI.

The environmental agencies involved in the ICC Interagency Work Group (IAWG) expressed concerns about aquatic life habitat protection, and, as a result, placed conditions within their permits to ensure that impacts are minimized and mitigated. MDE permit Special Conditions nos. 8, 9, 10, 15, 17, 18, 19b(mod), c, g(mod), and h(mod), 20, 21, 22, 24, 35, 36, 37, 39, 46, 48, 49, 50, 51, 57, and 58, and USACOE permit Special Conditions nos. 2, 3, 4c, g, and h, 6 through 9, 14, 15, 17 through 21, 25 through 28, 30 through 33, 35 through 39 together confirm SHA/MdTA's commitment to protect streams and aquatic life habitat along the ICC.

2. Maintain Stream Base Flow

Background studies and data collection was performed during development of the FEIS to determine stream base flow in critical locations within the ICC Study Area. Background studies included obtaining data collected by SHA/MdTA, MCDEP, MDNR Fisheries and other sources in preparing the Upper Paint Branch Baseflow and Temperature Monitoring Study Summary, Summer 2004 Data as found in Appendix F of this report. The purpose of this report was to establish baseline base flow and temperature data for future comparison.

A significant element of the project is the typical roadway cross section (see Part 6 – RFP Plans TS-1 through TS-5 (Appendix C)). In the roadway cross section SHA/MdTA includes roadside swales throughout that will meet MDE's grass channel credit requirements, both inside and outside SPAs. Additionally, within SPAs the median is widened to 50 feet from 36 feet to allow room for redundant water quality treatment by grass channel credit and dry-swale (called Linear Filters in the FEIS).

The planned dry-swale or bioswale is essentially a biofilter placed beneath grass channels to enhance chemical water quality and provide relief from runoff temperature spikes caused by impervious surface runoff. The bioswales will be constructed in short segments separated by storm inlets and / or checkdams to prevent any system-wide failures. Inlets are required to be placed on intervals to prevent the discharge velocity from the 1.5 inch rainfall event from exceeding 1 fps. Check dams will be placed as necessary to keep the 10-year return period storm flow velocity below the erosive threshold. Bioswales will include a shallow depth of stone beneath the underdrain to allow infiltration to occur, thereby recharging groundwater.

Within the SPA, SHA/MdTA has committed to providing infiltration where feasible based on soil test results. (See FEIS Section VII.B.5.c.). The infiltration method discussed there involves creating bottomless collection manholes downstream from the linear filter devices. The bottomless manholes will be set at an elevation that meets the separation distance minimum between the manhole device and groundwater as well as soil requirements found in MDE's 2000 Maryland Stormwater Design Manual.

The permitting agencies included conditions within their permits to ensure that spring seeps and infiltration are maintained, groundwater impacts are minimized and mitigated, and unnecessary impacts to streams are avoided in SPAs and elsewhere along the project. MDE permit General Condition no. 16 and Special Conditions nos. 6, 9, 11, 17, 18, 19b(mod), c, g(mod), and h(mod), 22, 28 through 34, 49, 50, 51, 57, and 58, and USACOE permit Special Conditions nos. 14, 15, 17 through 20 reinforce SHA/MdTA's commitments to maintain stream base flow.

3. Protect Spring Seeps and Wetlands

Spring seeps and wetlands along the ICC are described in FEIS Section II.E.7 (page II-82). Great pains and coordination with agencies were taken to minimize roadway footprint and concomitantly, environmental impacts, especially in areas of wetlands and seeps. Preconstruction monitoring was performed on streams throughout the ICC study area to supplement and corroborate stream data previously collected by MCDEP (See Upper Paint Branch Baseflow and Temperature Monitoring Study Summary,

summer 2004 Data in Appendix F of this report). The FEIS Plates include a “Limits of Disturbance” or “LOD” line set approximately 25 feet from the cut or fill limit of the roadway. The 25 feet line was a compromise between ensuring that sufficient space is available for the Design-Builder to construct in an environmentally sensitive and innovative manner, and the push to minimize impacts. Bridges that span the floodplains (not just the stream channels) are included on the project to minimize impacts to wetlands, streams and spring seeps. Discussions regarding existing spring seeps and wetlands may be found in FEIS Section II.E.7 (page II-82) and avoiding spring seeps and wetlands may be found in FEIS Section IV.F.7.e (page IV-223).

Because saving wetlands and forests along the ICC is a priority, SHA/MdTA is offering incentives in the Design-Build contracts to further avoid impacting these areas. A description of the incentives to foster decreases and disincentives to prevent increases in wetland impacts may be found in RFP Part 3 – Design Requirements, PS 310 – Environmental Performance Specification, Section 3.3.4, subsections 3.3.4.8 through 3.3.4.10 for seeps and wetlands. In PS 310 – Environmental Performance Specification, Section 3.3.5, there are incentives to encourage the Design-Builder to avoid existing forested areas.

Conditions placed within the issued permits ensure that the ICC avoids spring seeps and wetlands, and that unavoidable impacts are minimized and mitigated in SPAs and elsewhere on the project. Throughout both the MDE’ permit and the Corps’ permit, the agencies have reinforced regulatory requirements with regard to seep and wetland protection, as well as SHA/MdTA’s commitments to avoid and minimize impacts to spring seeps and wetlands. MDE Special Condition no. 24 addresses one of the larger seeps in the SPA, in Upper Paint Branch.

4. Maintain On-site Natural Stream Channels

Similar to protecting seeps and wetlands, minimization of disturbance and encroachment on natural stream channels was performed to the extent practicable during the planning process for the ICC. The primary methods for avoiding natural stream channels were to minimize project footprint and use bridges longer than hydraulically necessary in most cases to span streams. Discussions regarding existing natural stream channels (Waters of the US) along the project may be found in FEIS Section II.E.7 (page II-82), and avoiding natural stream channels may be found in FEIS Section IV.F.7.e (page IV-223).

Means and methods for maintaining on-site stream channels may be found in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 – Design Requirements, PS 310 – Environmental Performance Specification, subsections 1.1, 2.5, 3.1, and 3.3. In addition, discussions regarding incentives and increased disincentives to reduce impacts may be found in subsections 3.3.4.9 and 3.3.4.10.

Permit conditions ensure that the ICC avoids and maintains on-site natural stream channels, and that unavoidable impacts are minimized and mitigated in SPAs and elsewhere on the project. MDE permit General Conditions nos. 16 through 21, and Special Conditions nos. 2 through 6, 8, 11, 17, 18, 19b (mod), c, g (mod), h (mod), 20, 23, 44, 45, and 49, and USACOE permit Special Conditions nos. 1, 3, 4b, c, g, and h,

5, 15, 19, and 20, reinforce regulatory requirements and confirm SHA/MdTA's commitments to minimize impacts to natural stream channels.

5. Minimize Storm Flow Runoff Increases

Within the SPAs and Use III watersheds, the linear filter system that addresses SWM also has a quantity management component. Where possible outside of parkland, surface ponds that meet MDE's Channel Protection Volume (Cpv) requirements are proposed to address quantity management. These dry, 12-hour Cpv ponds meet MDE requirements and minimize the potential for temperature increases from solar radiation. Within parkland and where space is not available for surface ponds, Cpv will be addressed through underground storage either in pipes or concrete chambers. Underground pipes or chambers should further mitigate any thermal runoff concerns because underground storage by definition is shaded from the hot summer sun. Commitments to address storm flow runoff increases may be found in FEIS Section VII.B.5 Stormwater Management Features (page VII-25), and are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in Part 3 - Design Requirements, PS 303 - Drainage Performance Specification, subsection 3.7.

Because the environmental agency-members in the ICC Interagency Work Group (IAWG) expressed concerns about the effect of storm flow runoff increases in receiving streams, permit conditions have been included to ensure that impacts from potential runoff increases are minimized and mitigated. MDE permit Special Conditions nos. 6, and 28 through 34, and USACOE permit Special Conditions nos. 14, 15, and 17 through 20, reinforce SHA/MdTA's commitments to minimize runoff increases.

6. Identify and Protect Stream Banks Prone to Erosion and Slumping

Stream bank conditions along the ICC have been assessed as part of the ICC Natural Environment Technical Report (NETR), the results of which have been incorporated into the FEIS, Part II - Affected Environment, Section E.5 - Surface Water Resources (page II-57), and discussions specific to North Branch and Upper Paint Branch stream characteristics may be found in this section.

A discussion about anticipated consequences of ICC construction related to stream bank erosion in North Branch and Upper Paint Branch SPAs may be found in FEIS, Part IV - Environmental Consequences, Section F.5 - Surface Water Resources (page IV-151).

Means for protection of stream banks may be found in FEIS, Part VII - Preferred Alternative, Section C.3 - Environmental Measures and Conceptual Mitigation (pages VII-52 through VII-87), with streams addressed in general terms in subsection b (page VII-62). Additional measures for stream bank protection are offered in FEIS, Part VI - Environmental Stewardship, Section C.2.c - Stream Restoration Sites (page VI-11). This section provides a discussion on the repair and restoration of stream reaches in the study area that have degraded because of urbanization in the watershed and/or other factors not influenced by the ICC. FEIS Part VI, Sections C.2.e and C.2.f (page VI-11) discuss stormwater management retrofits considered under the Environmental Stewardship commitment. These stormwater retrofits include fulfilling

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water quality. After roadway runoff passes by overland sheet flow through vegetation to the linear filtering systems, these systems will remove suspended sediments and attached pollutants prior to discharge into a pipe underdrain system then a storm drain. The storm drain will lead to a large pipe and outlet reducer designed to attenuate flows in accordance with water quantity control requirements. Where appropriate (in North Branch only), dry, 12-hour extended detention (ED) ponds or underground storage chambers may be constructed in place of linear pipe systems for the purpose of providing flow attenuation to meet MDE Channel Protection Volume (Cpv) water quantity control requirements.

To facilitate the linear approach, earthen checkdams would be placed in medians and roadside ditches where stormwater filtering systems will be employed to limit drainage areas treated to manageable sizes. The actual spacing of the earthen checkdams would vary depending on the roadway grade, and will help limit potential failures to short segments of median (less than approximately 600 feet) where they can be quickly identified and corrected when they occur.

Stormwater management facilities will be designed based on appropriate geotechnical studies. These studies would include careful evaluation of soil and in-situ permeability tests at the design depth of infiltration devices. Infiltration rates determined by the permeability tests would be used to evaluate the feasibility of providing infiltration in specific locations as well as to size the infiltration devices. Facility designs will be in accordance with procedures set forth in the 2000 Maryland Stormwater Design Manual (MDE, 2000) and substituting a rainfall depth of $P=1.5$ inches in place of the $P=1.0$ inch presented.

In addition to the infiltration that will occur through the bottom of the linear stormwater management approach, infiltration devices will be employed where geotechnically feasible through the use of bottomless deep sump inlets and manholes to force treated water contact with native soils. Infiltration trenches and galleries would be provided where conventional approaches to stormwater management water quality treatment are being pursued. These practices will help offset the reduction in natural infiltration and recharge that occurs with construction of impervious surfaces and soil compaction.

Development of the concept and presentation to MCDPS and others specifically ensured that the concept was one that MCDPS typically would require of a developer in the SPA (See BTWG Meeting Notes and MCDPS Meeting Minutes). SHA/MdTA moved forward with the linear filter concept based on feedback from the various groups involved in the meetings.

To further guard against stream temperature resulting from increases in runoff events in the summer months, SHA/MdTA has committed to constructing the ICC roadway profile in such a way that drainage of approximately 13 acres of the Upper Paint Branch watershed in the vicinity of New Hampshire Avenue will be diverted to Northwest Branch after construction is complete. The diversion of the drainage area will be limited to an area approximately 200 feet to 400 feet wide, running approximately 2,200 feet East from the crossing of the ICC at New Hampshire Avenue, plus runoff from the first 1 inch of rainfall from the Montgomery County Department of Public Works and Transportation (MCDPW&T) yard on Cape May Road (See FEIS

recommendations made in watershed plans prepared by Montgomery County Department of Environmental Protection (MCDEP) to address existing water quality and water quantity control problems. In addition, SHA/MdTA identified a number of Special Protection Area Best Management Practices (SPA-BMPs) intended to improve stormwater runoff water quality and groundwater recharge from existing developed areas on a small scale, specifically within the SPAs.

The Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek may be found in Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7. General SWM requirements are set out in FEIS Section VII.B.5, as well as what is different and more restrictive in the SPAs.

Bridges proposed at major stream crossings generally span the floodplain, and, although temporary construction impacts may result at needed crossings, the ICC should not affect the long-term stability of streams under bridges. Bridge and culvert crossings of streams must conform to the conditions of the MDE and USACOE permits, as well as Federal Emergency Management Agency (FEMA) floodplain requirements. The MDE permit was issued based on general, planning level analyses that will be refined during design of the project. As project design progresses, MDE must review and approve all engineering analyses of crossings to ensure that stream quality and geomorphic characteristics will be maintained in accordance with MDE requirements (See MDE permit General Conditions and Special Conditions). The Corps permit includes numerous conditions for bridge and culvert crossings to ensure stream protection (See USACOE permit General Conditions and Special Conditions).

7. Minimize Increases to Ambient Water Temperature

During planning for the ICC, SHA/MdTA realized the sensitive nature of Use III and IV receiving streams within the ICC study area, and consequently obtained stream temperature data from MCDEP, performed additional temperature monitoring as documented in Upper Paint Branch Baseflow and Temperature Monitoring Study Summary, Summer 2004 Data (Appendix F of this report), and established a Brown Trout Work Group (BTWG) specifically to raise concerns and discuss impacts caused by runoff temperature increases and measures to mitigate for them. BTWG held numerous meetings and field walks that included members and guests from MCDEP, M-NCPPC-MC, MDE, Maryland Department of Natural Resources (DNR), Federal Highway Administration, USACOE, US Fish and Wildlife Service (FWS), US Environmental Protection Agency (EPA), and Metropolitan Washington Council of Governments. BTWG activities resulted in identification of important areas of North Branch and Upper Paint Branch to be avoided, and establishment of priorities for SWM BMPs. Indeed, it was through BTWG that the concepts of a wider median, use of infiltration, and use of linear filters in roadway side ditches were developed and refined, and presented to the permitting and other stakeholder agencies of the IAWG.

The linear approach to SWM for the ICC was well received when discussed at BTWG meetings and with MCDPS. This approach, being applied in Montgomery County SPAs and Use III watersheds (North Branch Rock Creek and Upper Paint Branch), involves constructing stormwater filtering systems (bioretention or sand filtration) within the roadway cross section, e.g. in median and roadside ditches as appropriate, to address

Part VII, Sections B.5.c page VI-27 and 28, USACOE permit Special Conditions nos. 15 and 18, and MDE permit Special Conditions nos 29 and 32). Even though surface runoff is being diverted from the Upper Paint Branch watershed area, infiltration devices will be employed to meet groundwater recharge needs (See USACOE permit Special Condition no. 19, and MDE permit Special Condition no. 33).

Diverting drainage area west of the ICC / Good Hope bridge raises the question about what happens to the highway runoff east of the diversion high point. SHA/MdTA has committed to conveying highway runoff west of Good Hope across the bridge over Good Hope and to the east where stormwater management measures may be employed prior to discharge to the mainstem of Paint Branch near the Good Hope / Paint Branch confluence.

In addition, bridge deck drainage within SPAs, from the North Branch and Tributary to North Branch bridges and Good Hope and Gum Springs / Paint Branch bridges, will be captured and treated by SWM measures prior to discharge. The commitment to capture and treat bridge deck runoff within the SPAs may be found in FEIS Part VII, Sections B.5.c page VI-27, with reinforcement in USACOE permit Special Condition no. 15, and MDE permit Special Condition no. 29.

The commitments mentioned above are confirmed in FEIS Section VII.B.5 Stormwater Management Features (page VII-25), and are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7.

8. Minimize Sediment Loading

SHA/MdTA has committed to exceed regulatory requirements to protect receiving streams from sedimentation both during and after construction. The FEIS speaks to existing soil conditions and meeting MDE requirements for erosion and sediment control measures during construction and limiting sediment as a water quality feature post construction in FEIS Sections II.E.1.a-b (pages II-44 through II-48), II.E.5.a-b (pages II-57 through II-68), III.E.1.b-c (pages III-27 through III-35), IV.A.1-7 (pages IV-1 through IV-11), IV.F.1 (pages IV-132 through IV-138), IV.F.5 (pages IV-151 through IV-187), IV.F.6.a-b (pages IV-195 through IV-207), VI.A-C (pages VI-1 through VI-12), VII.B.1 (page VII-4), VII.B.4-5 (pages VII-25 through VII-28).

SHA/MdTA has adopted several internal, voluntary upgrades to MDE minimum erosion and sediment control inspection and compliance requirements over the last several years. These upgrades are included in ICC performance specifications and the ICC Project Management Plan. For example, SHA/MdTA is employing an Independent Environmental Monitor (IEM) who inspects the construction project for adherence to environmental commitments and reports directly to the permitting agencies (See MDE permit Special Condition no. 10 and USACOE permit Special Condition no. 44). In addition, SHA/MdTA has included construction performance incentives and liquidated damages pertaining to erosion and sediment control in the Contract Documents for Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.8.

Furthermore, SHA/MdTA has committed to make a lump sum payment for ESC maintenance to the Design-Builder whenever any rainfall amount of 3.0 inches is exceeded in a 24 hour period. The Severe Weather Event specification in Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.14, ensures the Design-Builder will be compensated for repairing ESC devices damaged by severe weather without worry that the Design-Builder's original bid did not cover such a storm event.

Within the SPA, ESC specifications exceed regulatory requirements by requiring the Design-Builder to provide a narrative commitment describing construction methodologies within the SPA that incorporate the mandatory primary and supplemental ESC devices within the SPA as set out in Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.15.

9. Minimize Nutrient Loading

ICC SWM facilities are designed and constructed to reduce nutrient loads from urban runoff as provided in MDE's 2000 Maryland Stormwater Design Manual (See "<http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater;>" select "2000 Maryland Stormwater Design Manual" from the left column). ES projects that repair failing stream banks and retrofit existing developed area with SWM BMPs will reduce nutrient loads reaching receiving waters as well. A spreadsheet computer model developed to assess water quality impacts associated with the ICC as compared to existing land uses within the project right of way (See FEIS Section IV.F.5.b (page IV-172) demonstrates that the sections of Rock Creek (Table IV- 58, page IV-182) and the Anacostia River (Table IV-59, page IV-183) crossed by the ICC will see reductions in Total Nitrogen after construction of the ICC when compared to loadings from the existing, pre-construction land uses.

During construction, SHA/MdTA will minimize nutrient loading by requiring the Design-Builder to develop Nutrient Management Plans. (See Contract Documents for Contract A Part 3 – Design Requirements, PS 301 – Planting and Landscape Architectural Performance Specification, subsection 5.2.) SHA/MdTA coordinated with the local planning agency and others to develop Planting and Landscape Architectural Performance Specifications that rely heavily on use of native plant materials to limit the need for long term maintenance and reduce the need for fertilizers and additional nutrients that may otherwise be required for maintenance. The discussion of use of native plan materials may be found throughout Contract A Part 3 – Design Requirements, PS 301 – Planting and Landscape Architectural Performance Specification, and specifically subsection 4.1.1 (page 3).

10. Control Insecticides, Pesticides, and Toxic Substances

SHA/MdTA has set out requirements to control insecticides, pesticides, and toxic substances during construction. (See the Contract Documents for Contract A Part 3 – Design Requirements, PS 301 - Planting and Landscape Architectural Performance Specification, subsection 4.2.1, and PS 310 – Environmental Performance Specification, subsection 3.6.) SHA/MdTA coordinated with the local planning agency and others to develop Planting and Landscape Architectural Performance Specifications that rely heavily on use of native plant materials to limit the need for

long term maintenance and reduce the need for insecticides, pesticides, and toxic substances that may otherwise be required for maintenance. The discussion of use of native plant materials may be found throughout Contract A Part 3 - Design Requirements, PS 301 - Planting and Landscape Architectural Performance Specification, and specifically subsection 4.1.1 (page 3).

Summary

SHA/MdTA has performed many environmental studies and impact analyses associated with the Intercounty Connector project as documented in the project Natural Environment Technical Report and Draft and Final Environmental Impact Statements (available at the ICC project website <http://www.iccproject.com>). The NETR, DEIS and FEIS contain a multitude of references to Montgomery County Special Protection Areas (SPAs). This document has highlighted Montgomery County SPA Performance Goals and provided a narrative description demonstrating that the ICC project complies with the intent of the SPA. This document references sections of the ICC FEIS, environmental permits issued for the project, and other related and/or referenced documents (see Appendices) that substantiate the narrative descriptions of SPA compliance and the commitments by the Lead Agencies to develop, construct, and operate an environmentally sound project.

ICC Project Status Report #5

ATTACHMENT C (2/6/07 revision)

Process for ICC Water Quality Plan Review in Special Protection Areas

The review process described below responds to the Condition #6 of the ICC mandatory referral.

1. MCDPS to prepare a letter of concurrence that the compilation of studies, meetings, and permit conditions focused on the SPAs during ICC planning, coupled with contract design requirements, meet the intent of the SPA regulation.
2. SHA/MdTA to prepare mandatory referral packages for M-NCPPC review and comment, including documentation of the effects of Environmental Stewardship and Compensatory Mitigation projects in each SPA and other information needed by M-NCPPC to make staff findings referenced below.
3. The selected D-B team will work collaboratively with SHA/MdTA to prepare stormwater management and erosion and sediment control plans in accordance with contract requirements and MDE review procedures. Those plans will be shared with, and reviewed by, the EMT informally during design. During the informal review process, the M-NCPPC representative on the EMT will convene local interagency staff coordination meetings to be held between MDE (invited), DPS, DEP, SHA, and M-NCPPC staff to discuss SPA stormwater management plan issues, imperviousness, forest preservation, and environmental buffer issues.
4. Prior to the time of MDE submittal, M-NCPPC's EMT member will send the draft plans to DPS and M-NCPPC staff for review and comment:
 - a. One set of Draft SWM report and plans per contract (Upper Rock Creek for Contract A, Upper Paint Branch for Contract B).
 - b. M-NCPPC staff to arrange a Planning Board Public Hearing on SPA compliance for the ICC after local agency coordination regarding the water quality plans and prior to or concurrent with SHA submittal to MDE.
 - i. SHA/MdTA will provide support as necessary for an M-NCPPC hearing.
 - ii. M-NCPPC staff would make recommendations to the Planning Board concerning imperviousness, mitigation, SPA compliance, and other elements that may include Environmental Stewardship projects that contribute to the watershed.
 - c. Receive, consider and incorporate as desired comments from Board Public Hearing into consolidated M-NCPPC comments and submit to SHA for review and consideration.
5. Conduct all formal M-NCPPC and DPS staff reviews within Design-Build submittal review timeframes and submit comments to SHA and MDE. Submittal review timeframes shall be negotiated between SHA/MdTA and the successful D-B after award and in the context of SHA's partnering process. M-NCPPC, as a member of the EMT and IAWG, will have the opportunity to comment to SHA on D-B plans within the negotiated timeframes and participate in the partnering process.

6. Subsequent to Planning Board comment on water quality plans:
 - a. M-NCPPC staff would continue collaborative involvement in subsequent design work through EMT.
 - b. If SHA/MdTA or MDE finds alternatives to Planning Board recommendations, SHA/MdTA would coordinate with the M-NCPPC representative on EMT.

HISTORY OF PROTECTION OF THE UPPER PAINT BRANCH WATERSHED

The Paint Branch watershed is part of the Anacostia River system. Its headwaters occur in Montgomery County (in the portion designated as the Special Protection Area). Its streams flow into Prince Georges County. The Upper Paint Branch watershed has been recognized as a unique cold-water fisheries resource for over 30 years:

- The first watershed in Montgomery County to be designated as Use III waters (natural trout waters, which are the highest quality waters) by the State of Maryland (1974).
- The first watershed in the State of Maryland to be designated as a “Special Trout Management Area” (1980).
- Home to the only viable and self-sustaining trout population in the Washington, D.C. metropolitan area.
- The only Special Protection Area that has an Environmental Overlay Zone with an 8% limit on all new development (public and private) and prohibits highly polluting land uses.

Brown trout was stocked in Montgomery County in the 1930’s. It is believed that by the late 1930’s, the trout population in the County portion of Paint Branch was naturally reproducing. Over the years, Montgomery County has implemented many environmental protection measures to preserve the high quality stream system and related environmental features of the upper Paint Branch watershed. The 1981 Eastern Montgomery County Master Plan recognized the environmental sensitivity of Paint Branch, particularly its headwaters. The plan included recommendations on land uses, zoning (including downzoning), park acquisition, and development guidelines to help protect the upper watershed. In 1988, the Metropolitan Washington Council of Governments (COG) developed an inventory of possible stormwater management retrofit projects in the Anacostia River watershed in Montgomery County, including Paint Branch.

In the early 1990’s, Md. Department of Natural Resources reported to the Anacostia Watershed Restoration Committee (AWRC)¹ that the aquatic habitat conditions of the upper Paint Branch watershed was deteriorating. The AWRC formed an Upper Paint Branch Work Group to identify potential watershed protection and restoration strategies for the Good Hope Tributary to Paint Branch. The AWRC adopted the recommendations of the work group. These recommendations were to provide general guidance to government agencies for protecting the high water quality and aquatic habitat of the Good Hope Tributary.

In 1994, the Planning Board formed its own Upper Paint Branch Technical Work Group made up of seven local, state, and regional agencies. The work group’s purpose was to identify problems in the upper watershed and possible strategies and measures to protect and restore its high quality

¹ The AWRC is a multi-jurisdictional body established through the 1987 Anacostia Watershed Restoration Agreement to oversee regional efforts to protect and restore the Anacostia River system.

conditions, as part of a comprehensive amendment to the Eastern Montgomery County Master Plan. The work group's conclusions and recommendations were presented in the "Upper Paint Branch Watershed Planning Study", which was reviewed and supported by the Planning Board in 1995.

In 1995, the County Council designated the Paint Branch watershed upstream of Fairland Road as a SPA. An Environmental Overlay Zone covering the SPA was adopted in 1997. The overlay zone prohibits certain land uses and sets forth restrictions on other uses, including impervious surface limitations, in order to avoid and minimize water resource-damaging uses and activities.

A Limited Amendment to the Master Plan for the Eastern Montgomery County Planning Area was adopted by the County Council in 1996. This amendment recommends expansion of park acquisition in the Good Hope and Gum Springs subwatersheds for resource management and protection of the upper Paint Branch watershed. In 1997, the County Council adopted the master plans for Cloverly, Fairland, and White Oak. These master plans reconfirm the uniqueness and value of the Paint Branch resource. They include recommendations for land uses and expand park acquisition which build on and refine the recommendations for natural resource protection of the 1981 Eastern Montgomery County Master Plan.