

**Attachment D -
The ICC Mitigation Package**

Attachment D: The ICC Mitigation Package

No.	Site Descriptor	Mitigation Benefit	Mitigation Description	Map ID #
Stream Restoration Sites				
1	IC-59	1,100 linear feet	IC-59 and IC-62 are located on the mainstem of Indian Creek just upstream and downstream of the Powder Mill Road crossing. The concept for IC-59 and IC-62 includes stream restoration efforts (gabion removal, berm removal, bank stabilization, floodplain creation, fish blockage removal, riparian buffer enhancement, and habitat enhancement).	5 and 6
2	IC-62	1,900 linear feet		
3	NW-160	11,000 linear feet	This site includes the mainstem of Northwest Branch from Bonifant Road downstream to Indian Springs Golf Course. A portion of Rolling Stone tributary that joins Northwest Branch within the project site would also be included. The concept for NWB includes the following stream restoration efforts: floodplain creation to provide energy dissipation of erosive flood flows, reduce erosive shear stresses, reduce channel incision, and increase infiltration and groundwater recharge; bank stabilization to provide energy dissipation of erosive flood flows, reduce erosive shear stresses, and reduce bank erosion and instream sedimentation; enhancing the riparian buffer; installation of woody debris and other types of instream cover and gravel channel material to enhance the benthic and fish habitats and communities.	1
4	PB-12B	4,500 linear feet	PB-12B is located on Hollywood Branch and flows southeasterly from where the stream goes under Laurie Drive to the confluence with Paint Branch in the Fairview Estates community. The concept for PB-12B includes stream restoration efforts (bank stabilization, floodplain creation, utility conflict resolution, fish blockage removal, and riparian buffer enhancement).	4

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No.	Site Descriptor	Mitigation Benefit	Mitigation Description	Map ID #
5	PB-119	1,000 linear feet	Site PB-119 is located on the mainstem of Good Hope tributary to Paint Branch. The limits for this site extend from approximately 300 feet upstream to 700 feet downstream of the Good Hope Road crossing of this stream. The concept for PB-119 includes the following stream restoration efforts: floodplain creation to provide energy dissipation of erosive flood flows, reduce erosive shear stresses, reduce channel incision, bank stabilization to provide energy dissipation of erosive flood flows, reduce erosive shear stresses, and reduce bank erosion and instream sedimentation; and installation of woody debris and other types of instream cover and gravel channel material to enhance the benthic and fish habitats and communities.	3
6	PB-8	1,200 linear feet	PB-8 is located in the Left Fork subwatershed of the Upper Paint Branch watershed. PB-8 is made up of two reaches. The western reach is located entirely within Upper Paint Branch Park. The concept for PB-8 includes stream restoration efforts (bank stabilization, floodplain creation, riparian buffer enhancement, fish blockage removal, and habitat enhancement).	2
Fish Passage Sites				
7	PB-93A	500 linear feet of blockage removal	This is a fish passage site located at an exposed sewer line between US 1 and the College Park Airport. The blockage can be seen from the footbridge located approximately 1,000 feet upstream of the confluence of Paint Branch with Indian Creek. The drop at this site is about 1.5 feet and at lower flows is a complete blockage to upstream fish passage.	3
8	RC-131	500 linear feet of blockage removal	RC-131 is located east of the intersection of Beach Drive and Pinehurst Parkway on the mainstem of Rock Creek within Rock Creek Park. The blockage is an exposed utility crossing that has a vertical drop of approximately one foot causing a depth of flow of approximately two inches at normal flow.	2

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9	RC-131A	500 linear feet of blockage removal	RC-131A is located east of Beach Drive in the Candy Cane Park section of Rock Creek Park. This is a partial fish blockage caused by a concrete sewer encasement that is exposed at lower flow conditions. In addition to restoring fish passage over the blockage, other improvements slated for this site include streambank stabilization and riparian buffer improvement to improve stream habitat.	1
Wetland Creation Sites				
10	MR-5	19 acres	This site is an active cow pasture located at the intersection of Bethesda Church Road and Clarksburg Road within the floodplain of Bennett Creek.	Not Shown On Map
11	SC-2	21 acres	This site is located at the corner of Huntmaster Road and Brink Road within the floodplain of Goshen Branch. This site is also located across from the existing Hawkins wetlands creation site. The created wetlands could be hydrologically connected to the emergent wetlands on site and provide a riparian buffer to the stream.	Not Shown on Map
12	NW-128	3 acres	NW-128 is currently a ball field located in Northwest Branch Recreational Park. The site would be excavated 2'-3' to tap into groundwater or divert flows from Northwest Branch into the site. The ball field would be converted to a wetland/floodplain condition by removing the fill from the site.	2
13	PB-1	12 acres	PB-1 is located on the south side of Spencerville Road and east of Peach Orchard Road along a tributary to Paint Branch. The site begins as a farm pond located on the south side of the stream. The concept for this site is to create forested wetlands on the south side of the stream by excavating less than five feet to hydrologically connect to the stream and existing groundwater. The north side of the stream could be reforested with a mix of wetland and upland tree species. The pond would be removed as part of this concept to reduce thermal impacts to the stream.	3

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No.	Site Descriptor	Mitigation Benefit	Mitigation Description	Map ID #
14	SC-19	19 acres	This site is located east and west of Woodfield Road at the Great Seneca crossing. This site is situated in the floodplain of Great Seneca Creek and receives both surface water input and bank overflows that could support the hydrology of a created wetland.	Not Shown on Map
15	SC-21	6 acres	This site is located on the north side of Brink Road at the Great Seneca Creek crossing along the east bank of the stream. The hydrology for the created wetland would be supported by groundwater and the hydric soils that are mapped within the stream valley. Wildcat Branch, a tributary to Great Seneca Creek, is located just upstream of this site and is classified as Class III trout waters.	Not Shown on Map
16	NW-69	3 acres	NW-69 is located on the north side of Batchellors Forest Road across from Trotters Glen Golf Course in the headwaters of Batchellors Run. The concept for NW-69 includes the following efforts: grading and planting to create a forested wetland and spraying to eradicate multiflora rose. The concept for this site is to extend the existing wetland along the east side of the stream and plant the site with forested wetland species such as sycamore, spicebush and arrow-wood.	1
Water Quality Mitigation Sites				
17	PB-33	80 acres	This site is located in the Great Hope Manor community, adjacent to the Right Fork at Good Hope Road and Good Hope Drive. The concept includes cleaning up debris, adding infiltration trench and /or bioretention cells to the extent possible, retrofit of the existing riser to provide extended detention, expansion of the existing SWM pond next to the community center to provide extended detention and stabilization of an outfall channel to decrease sediment loads to Good Hope tributary.	2

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No.	Site Descriptor	Mitigation Benefit	Mitigation Description	Map ID #
18	PB-43	40 acres	Unvegetated outfall channel east of Timberlake Drive and Seibel Drive. The concept includes retrofitting existing outfall channel with grass swale, biofilter, or infiltration trench.	3
19	PB-46A	22 acres	Existing dry pond at west end of Perrywood Road. The concept is to convert a dry extended detention pond to attenuate flows without raising temperatures, including planting the riparian buffer and pond. Pond may need to expand into adjacent parkland to capture runoff for entire drainage area.	4
20	PB-114A	70 acres	Degraded stream channel at the south end of Eastway Drive in Peachwood Park. The concept includes evaluating alternatives previously developed by MCDEP and MWCOG to plan and construct an off-line extended detention facility to address one of the few remaining uncontrolled drainage areas contributing to Good Hope Tributary.	5
21	PB-49	134 acres	Uncontrolled runoff from tributary north of Rainbow Drive, east of Wembrough Street and west of Langside Street. The concept includes constructing a new dry extended detention pond to attenuate flows without raising temperatures and planting the riparian buffer and pond.	1
Floodplains				
22	General	Mitigation Commitment for impacts to Regulated Floodplains	Proposed parkland acquisition associated with stewardship opportunities and mitigation efforts for this project will further enhance floodplain values. Final hydrology and hydraulic design will be performed for the selected alignment during the final design process using final FEMA models, at which time structure type, span configuration, pier placement, etc. that cost effectively best fits the environment (total structure length, ROW limits, etc.) will be determined and coordinated with MDE as part of the MDE Non-tidal Wetlands and Waterways Construction Permit process. FEMA coordination will also be performed at that time to determine the impacts to regulated floodplains and floodways and potential mitigation measures.	Not Shown on Map

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No.	Station ID	Mitigation Benefit	Mitigation Description	Map ID #
Wildlife Passage				
23	I-370 Ramps (2 locations)	Wildlife Passage	Small mammal culverts would be located west of Shady Grove Road – Small Mammal Culverts are specially designed to accommodate small mammal passage. Some deer passage may be possible, depending on the final sizing. These culverts could include the use of a two-foot wide dry “shelf” alongside the waterway, which small mammals have been found to readily use, or the addition of a dry culvert cell alongside the culvert that carries the primary stream flow. These are generally proposed in areas where there is some nearby open space or habitat, but where a much larger deer culvert is not warranted because of expense, surrounding existing and proposed land use, or distance from another large deer crossing opportunity, such as deer culvert or bridge.	1
24	Sta.150+00	Wildlife Passage	Deer culvert would be located west of Shady Grove - Deer Culverts are specially designed to accommodate deer passage. Deer in the study area are extremely abundant and adaptable to the human landscape and have been found to use a wide variety of culverts for passage under existing roads. Based on discussions with the IAWG including MNCPPC, deer culverts will consist of rectangular culverts with a minimum size of 12 feet by 12 feet with a natural bottom. Minimal clearing will be 12 feet wide and 10 feet high. It is anticipated that one to two feet of sediment will accumulate within each culvert. Other culvert designs (round, arch) may also be considered as additional engineering efforts continue.	2
25	Sta. 173+00	Wildlife Passage	Deer Culvert would be located west of Redland Road (See Deer Culvert Description for Station 150+00)	3

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No.	Station ID	Mitigation Benefit	Mitigation Description	Map ID #
26	Sta. 207+00	Wildlife Passage	Hydraulic culvert would be located north of Garrett Road. Hydraulic Culverts are designed to accommodate hydraulic conditions; however, small mammal passage and some deer passage may be possible depending on the final sizing. Hydraulic culverts have been proposed in areas where there is likely to be a lack of any adjacent core habitat, or in areas where future development plans have been proposed. These hydraulic-only culverts will likely still provide some degree of safe passage to the local wildlife that exists in that immediate area. This likelihood is based on evidence of high wildlife usage of culverts in the study area and elsewhere in Maryland where no special design techniques were employed.	4
27	Sta. 240+00	Wildlife Passage	Bridge would be location northwest of Needwood Road and northeast of Garrett Road. A bridge structure would afford passage to all wildlife under the span. Studies will continue on these bridge crossings to determine if any enhancement techniques could be employed under the span to further encourage herptile and smaller mammal crossing. These techniques could include strategic placement of woody debris to help retain moisture	5
28	Sta. 276+00	Wildlife Passage	Deer culvert would be location southwest of Muncaster Mill Road (See Deer Culvert Description for Station 150+00).	6
29	Sta. 301+00	Wildlife Passage	Small mammal culvert would be located east of Muncaster Mill Road (See Small mammal culvert description for I-370 ramps).	7
30	Sta. 312+00	Wildlife Passage	Deer Culvert would be located east of Muncaster Mill Road (See Deer Culvert Description for Station 150+00).	8
31	Sta. 320+00	Wildlife Passage	Bridge would be located northwest of Promontory Court (See Bridge Description for Station 240+00).	9
32	Sta. 327+00	Wildlife Passage	Bridge would be located north of Promontory Court (See Bridge Description for Station 240+00).	10

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No.	Station ID	Mitigation Benefit	Mitigation Description	Map ID #
33	Sta. 360+00	Wildlife Passage	Small mammal culvert would be located east of Emory Lane (See Small mammal culvert description for I-370 ramps).	11
34	Sta. 415+00	Wildlife Passage	Hydraulic culvert would be located east of Georgia Avenue (See Hydraulic Culvert Description for	12
35	Sta. 420+00	Wildlife Passage	Hydraulic culvert would be located east of Georgia Avenue (See Hydraulic Culvert Description for Station 207+00).	13
36	Sta. 433+00	Wildlife Passage	Hydraulic culvert would be located south of Trotters Glen Golf Course (See Hydraulic Culvert Description for Station 207+00).	14
37	Sta. 435+00	Wildlife Passage	Hydraulic culvert would be located south of Trotters Glen Golf Course (See Hydraulic Culvert Description for Station 207+00).	15
38	Sta. 533+00	Wildlife Passage	Bridge would be located northwest of Bonifant Road (See Bridge Description for Station 240+00).	16
39	Sta. 555+00	Wildlife Passage	Bridge would be located over Bonifant Road (See Bridge Description for Station 240+00).	17
40	Sta. 595+00	Wildlife Passage	Bridge would be located south of Bonifant Road (See Bridge Description for Station 240+00).	18
41	Sta. 654+00	Wildlife Passage	Small mammal culvert would be located west of New Hampshire Avenue (See Small mammal culvert description for I-370 ramps).	19
42	Sta. 673+00	Wildlife Passage	Hydraulic Culvert would be located east of MD 650 (See Hydraulic Culvert Description for Station 207+00).	20
43	Sta. 690+00	Wildlife Passage	Bridge would be located east of Cape May Road (See Bridge Description for Station 240+00).	21
44	Sta. 740+00	Wildlife Passage	Bridge would be located southwest of Crest Hill Lane (See Bridge Description for Station 240+00) (740+00 and 750+00 bridge is located over two streams.)	22
45	Sta. 750+00	Wildlife Passage	Bridge would be located southeast of Crest Hill Lane (See Bridge Description for Station 240+00).	23
46	Sta. 839+00	Wildlife Passage	Hydraulic culvert would be located east of US 29 (See Hydraulic Culvert Description for Station 207+00).	24

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No.	Station ID	Mitigation Benefit	Mitigation Description	Map ID #
47	Sta. 880+00	Wildlife Passage	Bridge would be located south of Greencastle Road (See Bridge Description for Station 240+00).	25
48	Sta. 978+00	Wildlife Passage	Small mammal culvert would be located east of I-95 (See Small mammal culvert description for I-370 ramps).	26
Bird Habitat Creation				
49	General	Habitual Creation	Mitigation of impacts to bird habitat will be accomplished through the required reforestation for tree clearing. An emphasis will be placed on creating or enhancing large, contiguous blocks of forest important as forest interior habitat for birds.	Not Shown on Map
New Parkland				
50	Dungan Property North	44.9 acres	The Dungan Property North would provide 44.9 acres of replacement parkland adjacent to existing parkland in the North Branch Rock Creek Watershed. This property would provide stream valley protection, passive recreational opportunities, and community open space. It contains 738 linear feet of streams, 20 acres of forest, and 24.5 acres that would be reforested by SHA. Once reforested, there is potential in the future for up to 87 acres of new FIDS habitat on site and on adjacent lands in North Branch Stream Valley Park.	2
51	Llewellyn Property	23.2 acres	The Llewellyn property would provide 23.2 acres of replacement adjacent to the Northwest Branch Recreational Park. The property would include construction of four baseball/softball fields, one soccer field, onsite parking, and restrooms. The replacement fields would be superior in quality than the existing fields because they are located in upland areas that are less prone to flooding. Access to these replacement fields would be provided directly from MD 28, which is also an improvement over access to the existing fields from Layhill Road and Bonifant Road. This property would also provide 3 acres of reforestation land.	3

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No.	ID Descriptor	Benefit	Mitigation Description	Map ID #
52	Peach Orchard Allnut Property	118 acres	The Peach Orchard Allnut property would provide 118 acres of replacement parkland in the Upper Paint Branch Watershed. This site would provide stream valley protection and passive recreational opportunities. The Peach Orchard Allnut site would provide 15.9 acres of wetlands, 2,100 linear feet of streams, and 28.3 acres of forest. There would also be approximately 90 acres of potential reforestation land and 67 acres of potential future FIDS habitat. Also, because it is at the headwaters of the Paint Branch, it would serve to protect this portion of the stream.	4
53	Santini Road Properties	49.2 acres	The Santini Road Properties would serve to protect undeveloped land in the sensitive Rocky Gorge watershed, thereby providing stream valley protection, passive recreation, and community open space in this portion of the County. Though not directly adjacent to the T. Howard Duckett Watershed Property, these properties would be conserved as parkland and protected from future development. Therefore, they would continue to offer additional protection for the T. Howard Duckett (Rocky Gorge) Reservoir. These sites contain 35.2 acres of existing forest and an additional 14 acres would be reforested.	5
54	Southern Asia Adventist Property	23.2 acres	The Southern Asia Adventist Property would provide 23.2* acres of replacement parkland in the Upper Paint Branch Watershed. The site would provide stream valley protection and passive recreational opportunities. It contains extensive areas of stream valley buffer and good quality forest. It also contains the critical headwater wetland complexes of the Left Fork of the Paint Branch. These features would be protected by converting this land to parkland.	6

*It is expected that approximately six acres of land located on the Southern Asia Adventist and McNeill Properties would be used for the planned widening of MD 198. This acreage would be subtracted from the total acreage of these properties as shown above and the remainder of the land would be provided as mitigation for the ICC project.

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No.	ID Descriptor	Benefit	Mitigation Description	Map ID #
55	McNeill Property	36.2 acres	The McNeill Property would provide 36.2* acres of replacement parkland in the Upper Paint Branch Watershed. The site would provide stream valley protection and passive recreational opportunities. It contains extensive areas of stream valley buffer and good quality forest. It also contains the critical headwater wetland complexes of the Left Fork of the Paint Branch. These features would be protected by converting this land to parkland.	7
56	Casey Property at Hoyles Mill	459 acres	The Casey Property at Hoyles Mill is located outside of the ICC Study Area near Poolesville in Montgomery County. This site, which would become public parkland, would add an additional 459 acres to the park system adjacent to several existing parks including Seneca Creek State Park, South Germantown Recreational Park, Little Seneca Stream Valley Park and Hoyles Mill Conservation Park. Preservation of this property will add over 340 acres of existing forest and 214 acres of existing FIDS habitat to the park system. There is approximately 118 acres of open land that may be available for reforestation, which could also help increase the FIDS habitat to approximately 340 acres on site.	1
57	Unused Designated Transportation Area in Northwest Branch Stream Valley Park - Unit 5	21.3 acres	The unused portion of the Designated Transportation Area in Northwest Branch Stream Valley Park - Unit 5 would be converted to parkland adding 21.3 acres to the park. The conversion of this land would protect land adjacent to the existing park that has many of the same natural features and passive recreational functions as the adjacent parkland.	8
58	SHA-Owned Unused Designated Transportation Area Adjacent to Upper Paint Branch Stream Valley Park	7.6 acres	The unused SHA-owned Designated Transportation Area adjacent to Upper Paint Branch Stream Valley Park will be transferred to M-NCPPC for incorporation into the park. This area includes forests, wetlands, streams, and FIDS habitat. It was originally acquired by SHA for the ICC. It is not needed due to a change in the corridor for the ICC on the M-NCPPC's Master Plan in 1982. For further information about this 7.6-acre parcel, see the Addendum to the Section 4(f) Evaluation, which is attached as to this ROD.	9

*It is expected that approximately six acres of land located on the Southern Asia Adventist and McNeill Properties would be used for the planned widening of MD 198. This acreage would be subtracted from the total acreage of these properties as shown above and the remainder of the land would be provided as mitigation for the ICC project.

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Reforestation Sites				
59	Washington Suburban Sanitary Commission	200 acres	Approximately 200 acres of potential reforestation area has been identified on Washington Suburban Sanitary Commission (WSSC) property. These sites are located within the Rocky Gorge watershed and about the Triadelphia Reservoir. Approximately 165 acres are located in Montgomery County and 35 acres are in Howard County. Even though the 35 acres located within Howard County are outside of the counties in which the ICC could be constructed, they still meet the Maryland Reforestation Law criteria because they are located within the Rocky Gorge Watershed. Habitat and water quality improvements from reforestation within the WSSC properties would benefit Montgomery, Prince George's, and Howard Counties by enhancing the reservoir buffer, connecting forest tracts, and once established, creating forest interior habitat.	Not Shown on Map
60	Maryland Department of Natural Resources	200 acres	Coordination had initially occurred with Seneca Creek State Park staff regarding potential reforestation efforts within the park. Preliminary discussions resulted in the identification of approximately 200 acres of State parkland that could be used for reforestation purposes. Of the 200 acres, 36 acres are available immediately. In order to use State park lands, an internal review is required of each park parcel potentially used for reforestation purposes by the DNR's Land Management Unit. The purpose of the review is to ensure that reforestation efforts do not conflict with other potential park uses or commitments. DNR Land Management staff is also considering other State lands within the general proximity to the study area, other than Seneca Creek State Park.	Not Shown on Map

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No.	ID Descriptor	Benefit	Mitigation Description	Map ID #
61	Maryland-National Capital Park and Planning Commission	75-100 acres	The ICC study team is working closely with M-NCPPC staff to identify existing parkland properties that may be suitable for reforestation. M-NCPPC park properties or portions thereof located in 100-year floodplains or other sensitive environs are typically limited for active park use or the placement of structures, or for parking and are therefore ideal for reforestation. Numerous sites have been located throughout Montgomery County through the use of GIS and provided by the ICC study team to M-NCPPC for their review. Several M-NCPPC regional park managers are currently reviewing these sites for reforestation purposes. An estimated 75 to 100 acres is tentatively acceptable as reforestation areas.	Not Shown on Map
62	Parkland Mitigation Sites	100-150 acres	The ICC Team has identified 100 to 150 acres of open space that could be reforested within proposed parkland mitigation sites. This reforestation may include stream buffer planting and upland reforestation; both of which would improve habitat and water quality conditions.	Not Shown on Map
63	Wetland/ Stream Compensatory Mitigation and Environmental Stewardship Sites	75 acres	It is anticipated that as part of the wetland compensation and Environmental Stewardship efforts, additional reforestation acreage opportunities will be identified. Many of the wetland mitigation sites, for example, will have additional land other than the actual wetland area that could be used for reforestation. The ICC study team has identified approximately 75 acres of open space that could be reforested within the mitigation sites. This reforestation may include stream buffer planting and upland reforestation; both of which would improve habitat and water quality conditions.	Not Shown on Map

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64	Unassigned SHA Reforestation Acreage within Montgomery and Prince George's Counties	50 to 75 acres	In addition to the potential reforestation sites identified above, SHA has determined that reforestation credit exists within Montgomery and Prince George's County from planting that has occurred in response to previously completed projects. This credit is a result of planting that had occurred above and beyond what had been required under regulatory guidance for a particular SHA project. 37 sites are located with Montgomery County and 34 are in Prince George's County. Of the 114.1 acres that are located within Montgomery County, six of the sites totaling approximately 58 acres occur within WSSC property boundaries or within the vicinity of Triadelphia Lake Road. The 34 sites in Prince George's County comprise approximately 90 acres of the unassigned acreage. Overall field verifications have identified approximately 50 to 75 acres of unassigned sites that are either in good condition, or that could be reforested. Some of the sites were removed from the list due to the placement of noise walls, roadway improvements, or the inability to locate the reforestation area during the site verification process. Research on these sites will continue throughout the NEPA and mitigation processes.	Not Shown on Map
65	Reforestation with the Proposed ICC ROW	75 – 100 acres	Based on engineering concepts, there would be the creation of isolated parcels that are unsuitable for development, but possibly ideal for reforestation. Initial analysis has identified approximately 75 to 100 acres of reforestation can be expected from these areas. These areas exist throughout each corridor. In many cases, potential sites are adjacent to existing forest cover.	Not Shown on Map
(Visual Quality)				
66	General	Aesthetics	Configure the road, landscaping, retaining walls, and noise barriers in a manner that would make the facility less noticeable	Not Shown on Map

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67	General	Aesthetics	<p>Develop design standards for the overall facility that would increase its compatibility with the surrounding environment. Proposed Design Guidelines include:</p> <ul style="list-style-type: none"> • Use decorative finishes on publicly visible highway features in keeping with the overall highway theme and surrounding vernacular • Avoid or minimize community separations introduced by highway construction • Provide plant buffers to screen incompatible views between visually sensitive areas • Provide streetscape enhancements in keeping with the local vernacular on service roads and community streets that will be included as part of the ICC study • Maintain open vista over landscape where possible by framing viewsheds with landscape plantings • Provide reforestation plantings adjacent to existing forest tracts, and use species composition native to the area • Limit hardscape elements to areas where only necessary to accommodate environmental avoidance, minimization, and stewardship features • In instances where hardscape elements are used (i.e. retaining walls, overpasses, box culverts, riser structures, etc) in publicly visible areas, allow for rustic finishes such as timber, staining, or formlining • Limit park and forest impacts by reducing the roadway footprint to the minimum extent practical • Integrate ornamental planting and landscape buffering along the highway 	Not Shown on Map

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Section 106 MOA Stipulations				
68	MOA Stipulation I.A	Visual	To mitigate adverse visual impacts to the historic property caused by the ICC, MdTA and SHA will ensure that the area on the south side of Cashell Farm between Stations 265 and 295 within SHA's right-of-way for the ICC is landscaped in accordance with the landscaping plan cited in the MOA; the landscaping plan is implemented within one year following the completion of the construction of the ICC; and, any change or modification to the design or scheduling of the ICC will be coordinated with the MD SHPO and all interested parties identified in the MOA.	Not Shown on Map
69	MOA Stipulation I.B	Visual	To mitigate adverse visual impacts to the historic property caused by the ICC, MdTA and SHA will ensure that the area on the south side of Willow Grove within SHA's right-of-way between Stations 420 and 434 along the ICC is landscaped in accordance with the landscaping plan cited in the MOA; the landscaping plan is implemented within one year following the completion of the construction of the ICC; and, any change or modification to the design or scheduling of the ICC will be coordinated with the MD SHPO and all interested parties identified in the MOA.	Not Shown on Map
70	MOA Stipulation II	Additional Archeology	The ICC may adversely affect National Register eligible archeological sites pending the completion and results of archeological identification and evaluation studies that are identified under Stipulation II Treatment of Archeological Resources in the MOA.	Not Shown on Map
71	MOA Stipulation III	AMMR to adverse effects pending further archeology studies	Should historic properties be unexpectedly identified during the implementation of the ICC, the MdTA and the SHA shall ensure that reasonable efforts are made to avoid, minimize or mitigate adverse effects to such properties, and shall consult the MDSHPO to resolve any unavoidable adverse effects pursuant to 36 CFR §800.6. All work will be accomplished in accordance with the performance standards in Stipulation V of the MOA, and in accordance with the procedures specified in Stipulation IV of the MOA.	Not Shown on Map

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72	MOA Stipulation IV	Additional cultural resources studies for ancillary facilities	Ancillary activities including, but not limited to, environmental stewardship such as historic structure rehabilitation and wayfinding devices; stormwater management facilities, wetland mitigation sites, reforestation areas, hiker/biker facilities, or alignment modifications to the previously investigated alternatives may be added to the ICC in the future. Should such activities be added for which cultural resources studies have not been completed, the MdTA and the SHA shall ensure that consultation ensues with the MD SHPO and other interested parties and that all required cultural resources studies are implemented, adhering to all relevant standards and guidelines referenced in Stipulation V of the MOA.	Not Shown on Map
73	MOA Stipulation V	Environmental Stewardship	As part of the Environmental Stewardship Package developed for the ICC, MdTA and SHA propose to implement specific Community and Cultural Features designed to improve and enhance the cultural quality within the ICC study area. MdTA and SHA shall coordinate the implementation of its Environmental Stewardship in accordance with relevant provisions of Stipulations IV and VI.	Not Shown on Map
74	MOA Stipulation V.A	Rehabilitation of Woodlawn Manor Property Bank Barn	As part of the environmental stewardship efforts for the ICC, MdTA and SHA propose to assist the Maryland-National Capital Park and Planning Commission – Montgomery County with the rehabilitation of the Bank Barn located within the Woodlawn Manor property (MIHP No. M: 28-14) as a visitor center to serve as a trailhead for the Rural Legacy Trail and a gateway to historic Sandy Spring. MdTA and SHA shall ensure that the design of the project is compatible with the historic and architectural qualities of the Woodlawn Manor and Barn property and that all plans and specifications for the rehabilitation conform to the Secretary of Interior’s Standards for the Treatment of Historic Properties (36 CFR Part 68). MdTA and SHA will provide copies of the plans and specifications to the MD SHPO for review and approval.	Not Shown on Map

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75	MOA Stipulation V.B	Heritage Area Wayfinding Devices	Within one year of construction of the ICC, SHA in consultation with the Montgomery County Heritage Area (MCHA) Management Entity and the Anacostia Trails Heritage Area (ATHA) Management Entity will develop text and signs for wayfinding devices to assist motorists in identifying heritage tourism opportunities in the two certified heritage areas. The MdTA and the SHA will provide copies of the text and signs to the MD SHPO and the MCHA Management Entity and the ATHA Management Entity for a thirty day review and approval. The signs will be manufactured and installed within one year of the completion of the ICC in its entirety.	Not Shown on Map
76	MOA Stipulation XI	Annual MOA Implementation Reports	On or about February 1 of each year until the Lead Agencies and MD SHPO agree in writing that the terms of this MOA have been fulfilled, MdTA and SHA will prepare and provide an annual report to the MD SHPO addressing the following topics: Progress in constructing the ICC; Progress in installing the landscaping plan at J. H. Cashell Farm and Willow Grove; Status of archeological identification, evaluation, and treatment, as appropriate; Any problems or unexpected issues encountered during the year; and, any changes that MdTA and SHA believe should be made in implementing the MOA.	Not Shown on Map
Farmland				
77	General	Compensation for interruption to viable farm operations	Just compensation will be provided to farm owners whose property is within the required ROW (FPPA, 1981). If impacts were to interrupt viable farm operations, financial compensation would be considered as a mitigation option. However, it should be noted that the majority of farmlands identified are proposed for residential or commercial development.	Not Shown on Map

Attachment D: The ICC Mitigation Package

No.	ID Descriptor	Benefit	Mitigation Description	Map ID #
Air Quality				
78	General	Emissions Reductions	Construction equipment will be maintained to minimize noise emissions caused by inefficiently tuned engines, poorly lubricated moving parts and poor-ineffective muffling/exhaust systems.	Not Shown on Map
79	General	Emissions Reductions	The Lead Agencies will require the implementation of a Diesel Emission Reduction Plan for construction purposes.	Not Shown on Map
80	General	Emissions Reductions	Mobile source emissions can be reduced during construction by use of retrofits-oxidation catalysts on equipment and not permitting idling of delivery trucks or other equipment during long periods of time for unloading. This will be monitored during project construction.	Not Shown on Map
Proposed Sound Barriers for Further Study				
81	1	9 dBA, Avg IL*	Parkside Estates	Not Shown on Map
82	2/4	9 dBA, Avg IL*	Redland Station; Cashell Estates	Not Shown on Map
83	6	9 dBA, Avg IL*	Redland	Not Shown on Map
84	8/8-1	7 dBA, Avg IL*	Sycamore Acres; The Preserve	Not Shown on Map
85	9	8 dBA, Avg IL*	Oakdale	Not Shown on Map
86	10	5 dBA, Avg IL*	Longmead	Not Shown on Map
87	11	7 dBA, Avg IL*	Longmead Crossing	Not Shown on Map
88	12	7 dBA, Avg IL*	Gayfields	Not Shown on Map
89	13	7 dBA, Avg IL*	Longmead; Bel Pre Manor	Not Shown on Map
90	14	11 dBA, Avg IL*	Sherwood Forest	Not Shown on Map
91	15	8 dBA, Avg IL*	Stonegate; Stratford Manor Terrace; South Stonegate	Not Shown on Map
92	16	8 dBA, Avg IL*	Colesville Manor	Not Shown on Map
93	17	7 dBA, Avg IL*	Colesville	Not Shown on Map

Attachment D: The ICC Mitigation Package

No.	ID Descriptor	Benefit	Mitigation Description	Map ID #
94	19/21	7 dBA, Avg IL*	Spring Oak Estates; Gum Springs; Maydale; Stonecrest; Avonshire	Not Shown on Map
95	20	7 dBA, Avg IL*	Fairland	Not Shown on Map
96	22	10 dBA, Avg IL*	Tanglewood	Not Shown on Map
97	23	7 dBA, Avg IL*	Greencastle/Burtonsville	Not Shown on Map
98	23-1	7 dBA, Avg IL*	Saddle Creek	Not Shown on Map
99	24	8 dBA, Avg IL*	Greencastle Manor	Not Shown on Map
100	24-3	12 dBA, Avg IL*	Mayfair/Muirkirk	Not Shown on Map

* - Average Insertion Loss (dBA)

Hazardous Materials and associated Groundwater Mitigation

101	7	Soil and Debris Clean-up	Clean-up will be accomplished by removal of contaminated soil and debris to an off-site facility.	Not Shown on Map
102	37	Soil and Debris Clean-up	Clean-up of soils and debris will be accomplished by removal to an off-site facility, and the SVOC contaminated ground-water remediation will be accomplished by pumping and carbon filtration treatment.	Not Shown on Map
103	628	Soil and Debris Clean-up	Cleanup of soils and debris will be accomplished by removal to an off-site facility, and that SVOC contaminated ground-water remediation will be accomplished by pumping and carbon filtration treatment.	Not Shown on Map
104	951	Soil and Debris Clean-up	Cleanup of soils and debris will be accomplished by removal to an off-site facility, and that SVOC contaminated ground-water remediation will be accomplished by pumping and carbon filtration treatment.	Not Shown on Map
105	8926	Soil and Debris Clean-up	Cleanup of soils and debris will be accomplished by removal to an off-site facility, and that SVOC contaminated ground-water remediation will be accomplished by pumping and carbon filtration treatment.	Not Shown on Map
106	9574	Soil and Debris Clean-up	Clean-up will be accomplished by removal of contaminated soil and debris to an off-site facility.	Not Shown on Map
107	9576	Soil and Debris Clean-up	Clean-up will be accomplished by removal of contaminated soil and debris to an off-site facility.	Not Shown on Map