

PE 368-06 Water Treatment Plant
Site Plan

MSA.S.1829-5906

Approval 7/21/06
KLS

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401

(410) 260-3460 Fax: (410) 974-5338

www.dnr.state.md.us/criticalarea/

December 11, 2006

Mr. Nelson Bolender
Cecil County Board of County Commissioners
129 East Main Street
Elkton, Maryland 21921

Re: Perryville Water Treatment Plant
Critical Area Map Amendments

Dear Mr. Bolender:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the referenced program amendment to the County's Critical Area maps. At its December 6, 2006 meeting the Commission concurred with the Chairman's determination that the above referenced map amendments were refinements to the Cecil County Critical Area Program and recommended approval. On December 11, 2006 the Chairman approved the Cecil County Board of County Commissioners zoning decision to change the map designation of Parcels 548 and 549 found on Tax Map 29 from RCA to LDA.

Given that Parcel 548 included 0.95 acres of State wetlands, this area was not included in the reclassification and the total area changed is 4.05 acres. Since 4.05 acres of RCA was changed to another classification the County must deduct 0.20 acres (5% of 4.05) from the County's available growth allocation reserves.

The County is required to finalize the map changes within 120 days of this notice. Please provide a copy of the amended Critical Area map to the Commission. If you have any questions, please call me at (410) 260-3475.

Sincerely,

A handwritten signature in cursive script that reads "Kate Schmidt".

Kate Schmidt
Natural Resource Planner

Cc: Mr. Eric Sennstrom, Director of Planning and Zoning
Ms. Mary Ann Skilling, MDP
Ms. Denise Breder, Town of Perryville
CE Refinement File

TTY for the Deaf
Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450

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August 25, 2006

Ms. Mary Ann Skilling
Maryland Department of Planning
210 Inverness Drive
Church Hill, MD 21623

Re: Town of Perryville Water Treatment Plant Upgrade - State Wetlands

Dear Ms. Skilling:

Thank you for providing the information regarding the extent of State wetlands at the Perryville Water Treatment Plant site. It would appear that only 0.95 acres of tidal wetlands on the property meet the definition of "State wetlands", which is land under navigable waters of the State below the mean high tide. As a result, 3.95 acres is the appropriate acreage to use as the basis for calculating Critical Area requirements. Therefore, the proposed improvements on site meet the 15% impervious surface threshold.

The conditional approval granted the Town of Perryville on July 5th, 2006 included two conditions related to impervious surfaces:

- Provide an analysis of proposed impervious surface, identifying where reductions were considered and if any additional reductions can be made, especially in areas with sensitive resources;
- Any percentage of impervious surface over the 15% limit needs to be evaluated for the 10% pollutant reduction requirement.

Based on the above information, these conditions no longer apply at this time.

Sincerely,

A handwritten signature in cursive script that reads "Kate Schmidt".

Kate Schmidt
Natural Resource Planner

Cc: Ms. Denise Breder, Town Administrator

CRITICAL AREA COMMISSION
1804 West Street, Suite 100
Annapolis, Maryland 21401

MEMORANDUM

To: Project Subcommittee
From: Kate Schmidt, Natural Resources Planner
Date: August 25, 2006
Subject: Perryville Water Treatment Plant

Impervious Surface:

The conditional approval granted the Town of Perryville for the proposed expansions at the Water Treatment Plant on July 5th, 2006 included two conditions related to impervious surfaces:

- Provide an analysis of proposed impervious surface, identifying where reductions were considered and if any additional reductions can be made, especially in areas with sensitive resources;
- Any percentage of impervious surface over the 15% limit needs to be evaluated for the 10% pollutant reduction requirement.

The Town of Perryville, through their consultant Vortex Environmental conducted a reevaluation of the wetlands on site to determine whether they were State or private tidal wetlands. It would appear that only 0.95 acres of tidal wetlands on the property meet the definition of "State wetlands", which is land under navigable waters of the State below the mean high tide. As a result, 3.95 acres is the appropriate acreage to use as the basis for calculating Critical Area requirements. Therefore, the proposed improvements on site meet the 15% impervious surface threshold.

Based on this information, the above conditions no longer apply at this time.

Planting Plan:

The Town was required to provide an acceptable planting plan for impacts to the Buffer and Forest Interior Dwelling Bird Habitat to Commission staff for review and approval by September 5th, 2006. The Town is requesting a 30-day extension to complete this mitigation plan.

Robert L. Ehrlich, Jr.
Governor



Martin G. Madden
Chairman

Michael S. Steele
Lt. Governor

Ren Serey
Executive Director

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July 21, 2006

Ms. Mary Ann Skilling
Maryland Department of Planning
210 Inverness Drive
Church Hill, MD 21623

Re: Town of Perryville Water Treatment Plant Upgrade Conditional Approval

Dear Ms. Skilling:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On July 5, 2006, the Critical Area Commission unanimously approved the Town's proposal and site plan to expand the Town's water treatment plant located off Water Plant Drive, near the Town of Perryville. This approval included the following conditions:

Conditions Associated with Impervious Surfaces

- (1) Provide an analysis of proposed impervious surfaces, identifying where reductions were considered and if any additional reductions can be made, especially in areas with sensitive resources;
- (2) Any percentage of impervious surface over the 15% limit needs to be evaluated for the 10% pollutant reduction requirement;

Conditions Associated with Buffer and Forest Interior Dwelling Bird Habitat

- (3) The Town shall provide mitigation at a 1:1 ratio through natural regeneration for all temporary impacts outside of the Buffer;
- (4) The Town shall provide on-site mitigation at a 1:1 ratio for the 200 square feet of impact to Forest Interior Dwelling Bird Habitat near the existing forest edge;
- (5) The Town shall provide mitigation at 3:1 for temporary and permanent impacts to the Buffer;
- (6) The Town shall submit an acceptable mitigation plan to Commission staff for review and approval by September 5, 2006; and

Condition Associated with the Resource Conservation Area Designation

- (7) Due to the fact that a water treatment plant is not a use permitted in a Resource Conservation Area, the Town of Perryville or Cecil County will bring to the Commission a request to change the designation of the site from RCA to IDA due to the mapping error within 120 days.

In fulfillment of the above conditions, please provide Commission staff with the requested information at the time it is due. Should any assistance be required in regards to the request to change the mapping designation I am available at any time. Please note that should any changes to the site plan be proposed in the future, additional review and approval by the full Commission will be required. Should you have any questions, please feel free to contact me at 410-260-3475.

Sincerely,

A handwritten signature in cursive script that reads "Kate Schmidt". The signature is written in black ink and includes a long horizontal flourish at the end.

Kate Schmidt
Natural Resource Planner

Cc: Ms. Denise Breder, Town Administrator



Critical Area Commission

STAFF REPORT

July 5, 2006

APPLICANT: Town of Perryville

PROPOSAL: Perryville Water Treatment Plant Improvements

JURISDICTION: Town of Perryville

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Conditional Approval for RCA

STAFF: Mary Ann Skilling & Kate Schmidt

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.06

DISCUSSION:

The Town of Perryville is proposing to construct phased improvements to the Town's drinking water supply system at the existing water treatment plant and part of the distribution system to include:

1. Construction of a new 1.0 million gallon per day (MGD) plant with a membrane filtration to replace the existing .75 MGD plant.
2. Construction of a raw-water pumping station and transmission main to replace the existing facilities.
3. Construction of a 1.0 million-gallon elevated water storage tank and associated water transmission main.

The plant and a portion of the water distribution system improvements extending up Water Plant Road are within the Critical Area and within the 100' extended Buffer from tidal waters or 100' Buffer to a tributary stream. The Town currently owns the property for the water treatment plant; however it is located just outside of the municipal boundary in Cecil County. It is expected the Town will annex the property into the municipal limits and they will also consider redesignating the parcel from Resource Conservation Area (RCA) to Intensely Developed Area (IDA). However, the existing water treatment plant is currently designated as RCA.

The existing water treatment plant was built in 1972 and is located on the Susquehanna River on the northern part of Perryville's corporate limits. The parcel size is 4.9 acres of which 2.36 is tidal wetlands. The proposed improvements to the site include a building addition; a new control building; a building on top of an existing raw water pump station; additional pavement to provide parking and better turning radii for vehicles; flocculation tanks; a waste solids pump station; improvements to the holding tanks and conversion of the chlorine contact tanks; additional facilities required for the proposed upgrades; and replacement of the intake screens located within the Susquehanna River. The new improvements will increase impervious surface on the site from 4,356 square feet (3.9%) to 19,462 square feet (17.6%).

A temporary access road will be constructed for the purpose of installing the proposed water main to tie into an existing main as shown on the plan at Station 0+00 to Station 1+20 off of Water Plant Drive. The road will consist of 1,440 square feet of stone material. The stone will be removed upon completion of the proposed water main and the area will be restored by seeding, mulching and replanting a mix of deciduous and conifer trees. These improvements are in the RCA, but are not in the extended Buffer or the tributary stream Buffer.

The water line improvements will take place along Water Plant Road and Frenchtown Road. The Critical Area only extends up Water Plant Road to the junction with Frenchtown Road. A small perennial watercourse was observed within the study area between Water Plant Road and Frenchtown Road where water distribution improvements will occur. The watercourse originates in a stormwater swale to the west of Frenchtown Road, just to the south of the Route 95 overpass. The watercourse continues to the south along the western shoulder of Frenchtown Road, until it crosses under the roadway near the center of the study area. At this point the stream is within the Critical Area. The watercourse then flows south along the eastern side of Frenchtown Road. As part of the proposed distribution system improvements, a 16" ductile iron distribution pipe will be buried beneath two small crossings along this stream. The first crossing will bypass the stream flow to allow temporary access to the stream bed to install the water main. This work will be conducted according to standards of the Maryland Department of the Environment (MDE). Following the installation of the water main, the stream bottom will be restored to its present condition and any disturbed areas will be allowed to naturally regenerate. Impact to the stream will be temporary and should not last more than a day or two. The second crossing is not within the Critical Area. The total linear length of water line improvements is 880 feet, of which 120 feet are within the 100' Buffer to a tributary stream. A 10' limit of disturbance is established around the linear length of the work so total square footage of impacts is 8,800 square feet. All of these improvements will take place in currently vegetated areas.

Other project impacts include steep slopes within the extended 100' Buffer from tidal waters at the water treatment plant. The holding tanks for this portion of the project will be placed on an area of 15% slope. The method of operation requires that the water

discharge from these holding tanks be by gravity; therefore the steep slope location is necessary to the operation of the plant. This area will be graded for the installation and a grass swale provided to direct runoff to a safe outlet. Three rock outlet protection devices will also be installed for stormwater management. Improvements in this area will eliminate processed water discharge to the Susquehanna River. Approximately 1,525 square feet will be disturbed.

Concern
over
Maintenance

Will this be monitored?

will no longer
take place
↓
will go to
WWTP

Based on a study by Vortex Environmental for the water line extension, "no wetland hydrology was observed within the 2,000 linear feet study area during the field investigations." A letter from DNR's Wildlife and Heritage Division determined that there were no records for rare, threatened or endangered plants or animals known to occur on the project site (letter dated May 16, 2006). However, the forested habitat to the surrounding the site is Forest Interior Dwelling Birds (FIDS) habitat. Only a small area of edge habitat, approximately 200 square feet near the backside of the property where the holding tanks are proposed to be located, is proposed for clearing. The remainder of the work proposed is in existing grassed areas. FIDS mitigation of 1:1 for edge habitat will be provided on-site at the northern edge of the property.

The Town received an MDE Letter of Authorization (Authorization Number 200661922/06-NT-0038) dated June 7, 2006 to work in the intertidal zone. This work will be limited to already disturbed areas of existing infrastructure to minimize potential impacts to plant species of concern. The project involves utilization of the existing plant site; therefore, primary construction related impacts are not expected to be of major impact.

Conditional Approval Process

In order to qualify for consideration by the Commission for conditional approval for development at a higher density development in the RCA, it shall be shown by the proposing or sponsoring agency that the project has the following characteristics:

That there exist special features of a site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

The original water treatment plant was built in 1972 and logistically located for water intake from the Susquehanna River. At the time, enough land was included to provide room to upgrade for future growth. In addition to meeting growth needs, the project is necessary to meet improved water quality standards. The proposed water treatment plant (WTP) project involves the construction of a new 1.0 MGD plant with membrane filtration, a raw water pumping station and transmission main to replace the existing facility, and a 1.0 MGD elevated water storage tank and associated water transmission main. The new facility will address essential improvements to the raw water intake

structure, screen, pump station, and transmission line in order to provide requisite water treatment plant components to meet water quality treatment standards at the existing water treatment plants.

That the project otherwise provides substantial public benefits to the Chesapeake and Atlantic Coastal Bays Critical Area Program;

The project construction is designed to provide environmentally sensitive stormwater practices and uses an existing site within the Critical Area with minimal disturbance to sensitive areas. Stormwater management will be improved on-site as the project has been designed to eliminate the direct discharge of backwash into the Susquehanna River. Sediment erosion and stormwater management approvals have been received from Cecil County and the Cecil Soil Conservation District and will be in place during all phases of the project.

That the project is otherwise in conformance with this subtitle;

The impacts regarding the RCA are related to the existing Critical Area designation, which will be addressed when the site is annexed into the Town in the near future.

The conditional approval request shall, at a minimum, contain the following:

A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized local agency program or project;

A literal enforcement of the provisions of this subtitle would prevent the construction of upgrades to the water plant facility due to the physical location of the existing plant within the Resource Conservation Area. The upgrades are essential to provide quality drinking water for the residents of Perryville as well as to improve emergency water storage. The project has been designed to minimize impacts to sensitive areas by maintaining major new structures within open areas of the existing complex.

A proposed process by which the project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program;

All possible measures are to be taken to prevent pollution of the waters and habitats located in the project site. The sequence of construction is located on the Erosion and Sediment plans. Construction techniques will be followed throughout the duration of the project and are in accordance with the Cecil Soil Conservation District. The project will require minimal clearing and disturbance to the existing forested area.

Measures proposed to mitigate adverse effects of the project.

Landscape mitigation will be provided as required in the Critical Area regulations for Buffer, non-Buffer, and FIDS impacts. The Town of Perryville is beginning the process of annexation of the parcel at which time it will consider redesignating the parcel from Resource Conservation Area (RCA) to Intensely Developed Area (IDA).

The Commission is required to base its approval, denial or modification to this project on the following factors:

1. The extent to which the project is in compliance with the requirements of the relevant chapters of this subtitle;
2. The adequacy of any mitigation measures proposed to address the requirements of this subtitle that cannot be met by the project; and
3. The extent to which the project, including any mitigation measures, provides substantial public benefit to the overall Critical Area Program.

Staff Recommendation

Staff recommends the project be approved with the following conditions:

The Town of Perryville will bring to the Commission a request to change the designation of the site from RCA to IDA due to the mapping error within ~~90~~ days.

120

Critical Area Commission

STAFF REPORT

July 5, 2006

APPLICANT: Town of Perryville

PROPOSAL: Perryville Water Treatment Plant Improvements

JURISDICTION: Town of Perryville

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Conditional Approval for Buffer and FIDS Impacts

STAFF: Mary Ann Skilling & Kate Schmidt

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.06

DISCUSSION:

The Town of Perryville is proposing to upgrade their existing drinking water treatment plant and a portion of the water distribution systems extending up Water Plant Road in the Critical Area. As previously discussed, the plant will have impacts to the 100-extended Buffer from tidal waters and impacts to the 100' Buffer from a tributary stream. Please refer to the previous staff report for a full discussion of the project.

In summary impacts to the Buffer and FIDS are as follows:

- 15,586 square feet of additional impervious surface at the WTP which will occur within existing grassed areas. Of this, there will be approximately 1,525 square feet of impact to steep slopes in order to install required holding tanks that will be gravity fed.
- 120 linear feet of water line improvements along Water Plant Road, which will have a 10' limit of disturbance and will take place within existing grassed or vegetated areas.
- Potentially 200 square feet of impact to edge FIDS habitat at the base of the steep slope area during installation of the holding tanks. The FIDS habitat exists mostly to the northwest of the site, but does extend across the lower wetland area.

Conditional Approval Process

In order to qualify for consideration by the Commission for conditional approval for impacts to the Buffer and potential impacts to FIDS habitat, it shall be shown by the proposing or sponsoring agency that the project has the following characteristics:

That there exist special features of a site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

The original water treatment plant was built in 1972 and logistically located for water intake from the Susquehanna River. As stated previously, the new facility will address essential needs in order to provide requisite water treatment plant components to meet water quality treatment standards at the existing water treatment plant and provide for future growth.

That the project otherwise provides substantial public benefits to the Chesapeake and Atlantic Coastal Bays Critical Area Program;

The project construction is designed to provide environmentally sensitive stormwater practices and uses an existing site within the Critical Area with disturbances to sensitive areas minimized to the extent possible. The extended Buffer on the WTP site is due to the presence of steep slopes at the back of the slope, which will be mainly avoided. The replacement of the sewer line will mostly occur within the right-of-way of the water treatment plant access road. Impacts for the water line are temporary and will be mitigated. All Buffer impacts will be mitigated at a ratio of 3:1. The potential FIDS impact can be mitigated on-site.

That the project is otherwise in conformance with this subtitle;

The impacts to the Buffer and to FIDS habitat have been minimized to the extent possible.

The conditional approval request shall, at a minimum, contain the following:

A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized local agency program or project;

A literal enforcement of the provisions of this subtitle would prevent the construction of upgrades to the water plant facility due to the physical location of the existing plant

within the extended Buffer and adjacent to FIDS habitat. The upgrades are essential to provide quality drinking water for the residents of Perryville as well as to improve emergency water storage. The project has been designed to minimize impacts to sensitive areas by maintaining major new structures within open areas of the existing complex with minimal impacts to the extended Buffer. The placement of the holding tanks near the FIDS area is necessary for the design of the facility; however associated clearing will be minimized to the extent possible.

A proposed process by which the project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program;

As stated previously, all possible measures are to be taken to prevent pollution of the waters and habitats located in the project site.

Measures proposed to mitigate adverse effects of the project.

The following impacts are proposed in the Buffer: 15,586 square feet of additional impervious surface at the WTP which will occur within existing grassed areas, and 120 linear feet (at 10' width) of temporary disturbance for the water line replacement totaling 16,786 square feet. The remaining impacts will occur outside of the Buffer; 1,440 square feet of temporary disturbance for the access road and 7,600 linear feet of temporary disturbance for the water line replacement totaling 9,040 square feet. The town proposes 1:1 mitigation through natural regeneration for the temporary disturbance of the access road and water line that are outside of the Buffer. A mitigation plan at the 3:1 ratio for all Buffer impacts totaling 50,358 square feet plus 9,040 square feet for non-Buffer impacts will be developed for staff approval prior to commencing the project. As part of that planting plan, FIDS mitigation at 1:1 for the 200 square feet of impact will be provided on-site.

The Commission is required to base its approval, denial or modification to this project on the following factors:

1. The extent to which the project is in compliance with the requirements of the relevant chapters of this subtitle;
2. The adequacy of any mitigation measure proposed to address the requirements of this subtitle that cannot be met by the project; and
3. The extent to which the project, including any mitigation measures, provides substantial public benefit to the overall Critical Area Program.

Staff Recommendation

Staff recommends the project be approved with the following conditions:

1. The Town of Perryville shall provide mitigation at 1:1 through natural regeneration for all temporary impacts outside of the Buffer.
2. The Town of Perryville shall provide FIDS mitigation at 1:1 for 200 square feet of edge habitat impact near the existing forest edge on-site.
3. The Town of Perryville shall provide mitigation at 3:1 for temporary and permanent impacts to the Buffer. The City shall submit an acceptable mitigation plan for staff approval by September 5, 2006 to meet this requirement.

4.

Critical Area Commission

STAFF REPORT

July 5, 2006

APPLICANT: Town of Perryville

PROPOSAL: Perryville Water Treatment Plant Improvements

JURISDICTION: Town of Perryville

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Conditional Approval for Impervious Surface

STAFF: Mary Ann Skilling & Kate Schmidt

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.06

DISCUSSION:

The Town of Perryville is proposing to upgrade their existing drinking water treatment plant and a portion of the water distribution systems extending up Water Plant Road in the Critical Area. As previously discussed, the lot is 4.9 acres in size, however there are 2.36 acres of tidal wetlands. Therefore, impervious surface on the remaining portion of the parcel increases from 3.9% to 17.6% after construction. Please refer to the previous staff report for a full discussion of the project.

Conditional Approval Process

In order to qualify for consideration by the Commission for conditional approval for impervious surface over 15%, it shall be shown by the proposing or sponsoring agency that the project has the following characteristics:

That there exist special features of a site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

The original water treatment plant was built in 1972 and logistically located for water intake from the Susquehanna River. As stated previously, the new facility will address essential needs in order to provide requisite water treatment plant components to meet

water quality treatment standards at the existing water treatment plant and provide for future growth.

That the project otherwise provides substantial public benefits to the Chesapeake and Atlantic Coastal Bays Critical Area Program;

The project construction is designed to provide environmentally sensitive stormwater practices and uses an existing site within the Critical Area with minimal disturbance to sensitive areas. Surface runoff will sheet flow over grass, floodplains and tidal wetlands prior to reaching the discharge point from many of the new facilities. Three new rock outlet protection devices will be installed on the site to improve stormwater runoff. The project has been designed to eliminate the direct discharge of backwash into the Susquehanna River. Sediment erosion and stormwater management approvals have been received from Cecil County and the Cecil Soil Conservation District and will be in place during all phases of the project.

That the project is otherwise in conformance with this subtitle;

The impacts regarding the impervious surfaces are related to the existing Critical Area designation, which will be addressed when the site is annexed into the Town in the near future.

The conditional approval request shall, at a minimum, contain the following:

A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized local agency program or project;

A literal enforcement of the provisions of this subtitle would prevent the construction of upgrades to the water plant facility due to the physical location of the existing plant within the Resource Conservation Area. The upgrades are essential to provide quality drinking water for the residents of Perryville as well as to improve emergency water storage. The project has been designed to minimize impacts to sensitive areas by maintaining major new structures within open areas of the existing complex.

A proposed process by which the project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program;

As stated previously, all possible measures are to be taken to prevent pollution of the waters and habitats located in the project site.

Measures proposed to mitigate adverse effects of the project.

The project construction is designed to provide environmentally sensitive stormwater practices and uses an existing site within the Critical Area with minimal disturbance to sensitive areas. Surface runoff will sheet flow over grass, floodplains and tidal wetlands prior to reaching the discharge point from many of the new facilities. Three new rock outlet protection devices will be installed on the site to improve stormwater runoff. The project has been designed to eliminate the direct discharge of backwash into the Susquehanna River.

The Commission is required to base its approval, denial or modification to this project on the following factors:

1. The extent to which the project is in compliance with the requirements of the relevant chapters of this subtitle;
2. The adequacy of any mitigation measure proposed to address the requirements of this subtitle that cannot be met by the project; and
3. The extent to which the project, including any mitigation measures, provides substantial public benefit to the overall Critical Area Program.

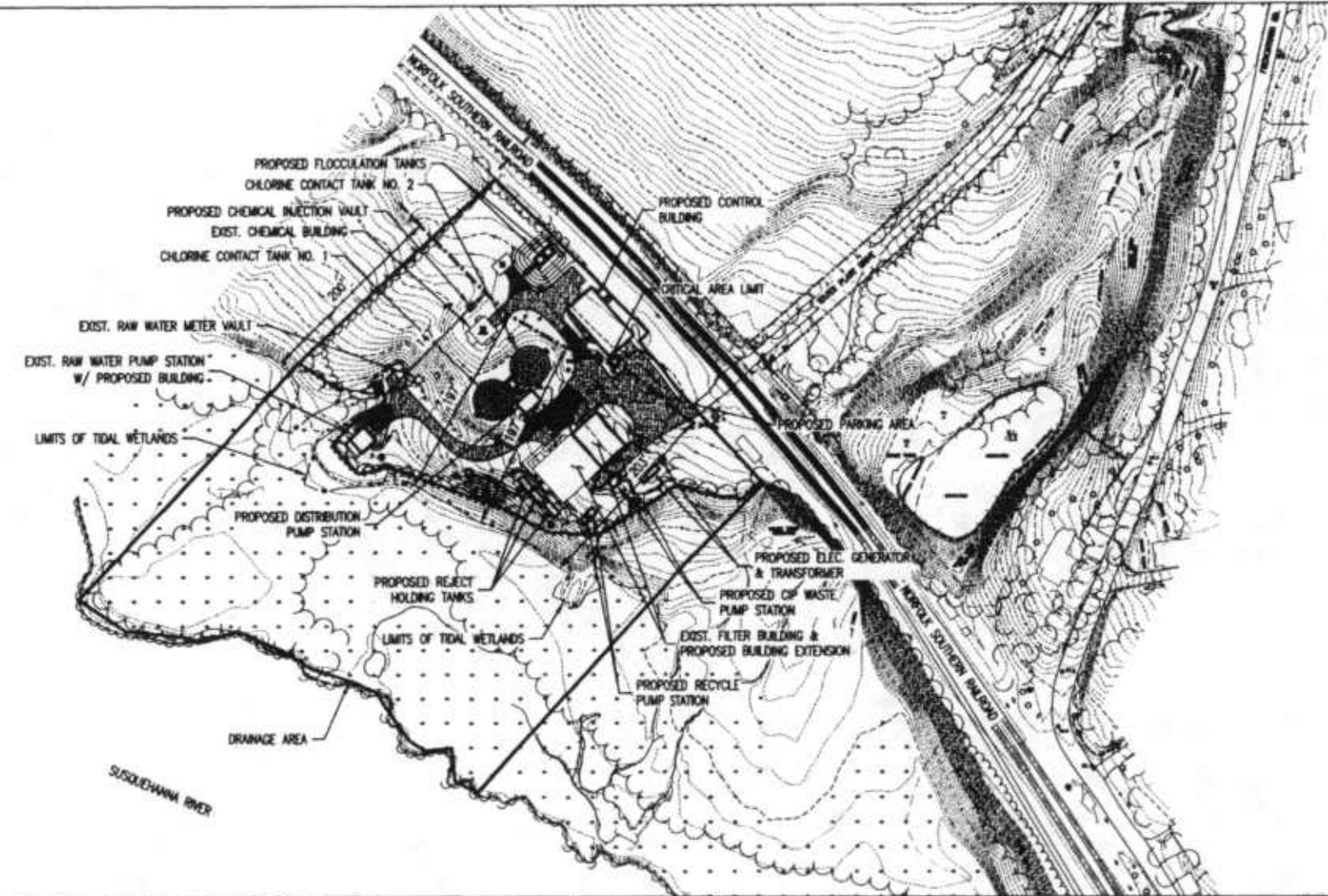
Staff Recommendation

Staff recommends the project be approved with the following conditions:

The Town of Perryville will bring to the Commission a request to change the designation of the site from RCA to IDA due to the mapping error within 90 days.

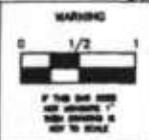
- ① - The Town will return to the Commission to demonstrate minimization of imp. surfaces on site. *Whether any additional reductions can be made, especially in areas of sensitive habitats.*
- monitoring plan for stormwater & WWTP
 - Demonstrate 10% pollutant reduction
- ② Any imp. surface over ³ 15% threshold must be evaluated & compensated for meeting the Commission's ³ guidelines for 10% pollutant reduction requirements. *to meet the*

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REV	DESCRIPTION OF REVISION	DATE	BY

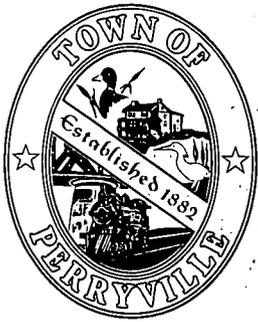
URS
 1200 Philadelphia Pike
 Wilmington, DE 19808
 Tel: 302.791.0700
 Fax: 302.791.0706



SCALE	1"=100'
PROPOSED	RED
EXISTING	BLACK
REVISION	
DATE	2/14/06

DRAINAGE AREA PLAN - POST DEVELOPMENT
 THE TOWN OF PERRYVILLE
 PERRYVILLE WATER TREATMENT PLANT IMPROVEMENTS
 CECIL COUNTY, MARYLAND

REVISION	0
PROJECT	20712742
DRAWN	
SHEET	OF



Town Commissioners of Perryville

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Perryville, Maryland 21903-0773
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(410) 642-6391 (Fax)
Email: townhall@perryvillemd.org

Mayor
James L. Eberhardt

Commissioners
Barbara A. Brown
Timothy A. Tolbert
Richard W. Baker
Austin D. Amos

Town Administrator
Denise Breder

August 24, 2006

Ms. Kate Schmidt
Critical Area Commission
1804 West Street, Suite 100
Annapolis, MD 21401

Re: Town of Perryville Water Treatment Plant Upgrade Conditional Approval

Dear Ms. Schmidt:

The Town has been working on the conditions set forth by the Commission for the above referenced project. A letter has been submitted regarding the Conditions Associated with Impervious Surfaces to you with the hope that the revised calculations will supersede that condition. Additionally, a request has been submitted to Cecil County Planning and Zoning to change the Critical Area designation of the property from RCA to LDA in order to meet the Condition Associated with the Resource Conservation Area Designation. However, we find that we need additional time to meet the requirement set forth in the Conditions Associated with Buffer and Forest Interior Dwelling Bird Habitat. Therefore, we respectfully request that the September 5, 2006 deadline to submit a mitigation plan for review and approval by the Commission be extended to the November 1, 2006 Commission meeting.

I appreciate any assistance that you can give. Please let me know if this request has been approved. If you have any questions or concerns, please call me at 410-642-6066.

Thank you,

Denise Breder
Town Administrator

CC: Mary Ann Skilling
Mayor James Eberhardt
Commissioner Timothy Tolbert
Mark Prouty

RECEIVED

AUG 28 2006

CRITICAL AREA COMMISSION

Schmidt, Katherine

From: Maryann [maryann@dmv.com]
Sent: Friday, June 09, 2006 11:34 AM
To: Owens, Mary; Serey, Ren; Esslinger, Regina
Cc: Schmidt, Katherine
Subject: Perryville Water Treatment Plant

All: I met with Kate on Tuesday to discuss the upgrades of the Perryville water treatment plant. Although there are some issues regarding the property being outside the corporate limits, the property is owned by the town. Mary had suggested that we get the property annexed and present it as a mapping mistake – this is in the works. Due to time frame for this process combined with other demands on the town (in particular getting this project underway), the town wants to proceed in getting the Commission approval of this project (whatever it takes) by the July meeting. I have most of the information available and will be determining impacts to the buffer, steep slopes and stream buffers and will include in the staff report (a draft is attached). This project is important to the town and will improve the existing plant by eliminating the back washing of waste water to the Susquehanna and provide water quality structures. The plant was built in 1972 and this is the first major upgrade. Unfortunately, the site was designated RCA by the county, clearly a mapping mistake, and that will be addressed at the time it is brought into corporate limits. For now I need to know what other issues besides buffer that may be encountered due to it being RCA (with a grandfathered use) at this time. Since the property is in the county, I presume I will be following the county regulations. I have had several conversations with the county and they have no problem with me preparing the information and writing a letter in support of the project. I would appreciate your help with this project. If you want to meet to discuss I can do so on Monday, Wednesday or Thursday of next week.

Mary Ann

Critical Area Planner

6/22/2006

TOWN OF PERRYVILLE
WATER TREATMENT PLANT UPGRADE

MITIGATION PLAN

CONDITION 3: The Town shall provide mitigation at a 1:1 ratio through natural regeneration for all temporary impacts outside of the Buffer.

Area 3 and 4: Once work is completed the disturbed areas will be seeded per the construction plans and allowed to naturally regenerate. There is an abundant seed source from the surrounding forest to achieve this goal.

CONDITION 4: The Town shall provide on-site mitigation at a 1:1 ratio for the 200 square feet of impact to FID habitat near the existing forest edge below the reject holding tanks.

Area 5: Two (2) 2 inch caliper White Ash (*Fraxinus Americana*) will be planted near the forest edge.

CONDITION 5: The Town shall provide mitigation at 3:1 for temporary and permanent impacts to the Buffer. Based on the reexamination of impacts inside and outside the Buffer, the following information revises the total mitigation required at 3:1 mitigation and makes recommendations for meeting this requirement. The Town shall mitigate at 3:1, 10,301 square feet (total 30,903 square feet).

IMPACTS IN THE BUFFER (REVISED)

✓Chlorine Tanks	2,690 Square feet
✓Dist. Pump Station	295
✓Pavement around Filter Bldg	2,855
✓Bldg Extension	1,628
✓Pavement Radius	113
✓Raw Water Pump Station Additional Imp.	518
✓Reject Holding Tanks	350
✓Recycle Tanks	140
✓Waste CIP Pump Station	39
✓Generator/Substation	480
 TOTAL	 10,301

IMPACTS OUTSIDE THE BUFFER (REVISED)

✓ Pr. Floc Tanks	206
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✓ Control Bldg	2,379
✓ Parking Lot NW Next to Control Bldg	1,242
✓ Portion of Parking Lot SE of Control Bldg	1,458
TOTAL	5,285 Square feet

Area 1: Approximately 8,500 square feet will be planted with seedlings 7' on center (50 sf credit). A mix of deciduous, native hardwood trees will be planted (170 trees). $170 \times 50 = 8500$

Area 2: Approximately 1,800 square feet will be planted with seedlings 7' on center (50 sf credit). A mix of deciduous, native hardwood trees will be planted (36 trees). Trees in both Area 1 and 2 are within a tall fence that will help provide protection from deer damage. The areas will be marked as a forest mitigation site. $36 \times 50 = 1800$

Total Required Mitigation		30,903
Area 1	8,500 sf	
Area 2	1,800 sf	
Total Planted on Site		10,300 sf on site ✓
Required Balance		20,603 sf ?

* The balance of 20,602 square feet at .40 per square feet (per Section 132,7,d of the Town Ordinance) will be paid to a mitigation fund. The Town proposes to use the some of the funds to plant larger trees in the Municipal Park within the Buffer when the Master Plan is finalized. The Town will pay \$8,241 to a mitigation fund in order to meet the balance of this requirement. A fence surrounds the WTP site and will provide protection for the plantings. Signage will be placed to denote a conservation area - no mow zone.

Attachment: Exhibit 1: Water Treatment Plant Site Plan & Planting Areas

* Review w/ Lisa



Maryland Department of Planning

Robert L. Ebrlich, Jr.
Governor

Michael S. Steele
Lt. Governor

August 18, 2006

Audrey E. Scott
Secretary

Florence E. Burian
Deputy Secretary

Ms. Kate Schmidt
Critical Area Commission
1804 West Street, Suite 100
Annapolis, MD 21401

Re: Town of Perryville Water Treatment Plant

Dear Kate:

The consultant Vortex Environmental evaluated the tidal wetlands on the water treatment site to determine the extent of "State wetlands". The original determination as mentioned in the attached letter was done to delineate the boundaries of the non-tidal and tidal wetlands and watercourses within the study area for the project. Based on a reevaluation of the wetlands, approximately .95 acres of tidal wetland complex would be considered "State wetlands".

Below is the new impervious surface calculations based on this information.

Total Acres 4.9 Acres minus .95 State wetlands	3.95 acres
	172,062 square feet x .15 = ✓
Maximum impervious surface 15%	25,809 square feet
Proposed Impervious Surface	19,462.00 square feet
Balance	6,347 square feet

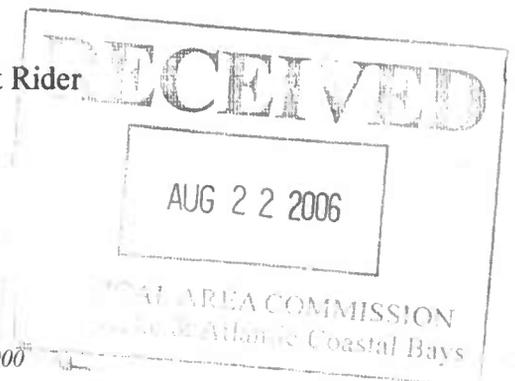
Based on this information, it would appear that the conditions associated with impervious surface no longer apply. Please let me know if any further information is necessary regarding this matter.

Sincerely,

Mary Ann Skilling
Critical Area Circuit Rider

Copy: Denise Breder, Town Administrator

Attachments: Letter & Maps from Vortex Environmental





Vortex Environmental

NATURAL RESOURCE MANAGEMENT & RESTORATION

August 8, 2006

Ms. Mary Ann Skilling
Critical Area Planner
Maryland Department of Planning
120 Broadway, Suite 10
Centreville, MD 21617

**RE: STATE VS. PRIVATE TIDAL WETLAND ASSESSMENT ON THE
PERRYVILLE WATER TREATMENT PLANT IMPROVEMENTS
PROJECT; CECIL COUNTY, MARYLAND**

Dear Mary Ann:

Vortex Environmental has conducted an evaluation of the tidal wetlands on the Perryville Water Treatment Plant Improvements Project to determine if the existing tidal wetland areas should be categorized as "State wetlands" or "Private Wetlands". On May 26, 2005, Vortex Environmental conducted a wetland delineation on the existing water treatment plant facility as well as the proposed water line route for the Perryville Water Treatment Plant Improvements Project. The wetland delineation was intended to delineate the boundaries of the non-tidal and tidal wetlands and watercourses within the study area for the project. At the time of this initial investigation no determination was made on the categorization of the existing tidal wetlands.

Wetland 1 is a large wetland complex located in the western portion of the plant facility, mainly within the 100 year floodplain of the Susquehanna River. This wetland complex extends to the north and south outside the study area for this project. The vast majority of this wetland complex would be considered tidal and it contained emergent, scrub-shrub, and forested vegetative components.

This wetland complex covers a total of 2.39 acres within the study area of this project, and extends from the eastern bank of the Susquehanna River, east to the slopes adjacent to the existing water treatment plant facility.

It is the opinion of Vortex Environmental that approximately 0.95 acre of this tidal wetland complex would be considered "State wetlands". These "State wetland" areas are located below the mean high water line and are dominated by standing water or deeply rooted aquatic vegetation. These "State wetlands" are highlighted in orange on the attached exhibit. The remaining approximately 1.44 acres would be considered "Private wetlands". These areas are located at or above the mean high water line and are dominated by scrub-shrub or forested vegetation. The "State wetlands" and "Private wetlands" boundary is a result of slight elevation changes within the tidal wetland complex.

Ms. Mary Ann Skilling
August 8, 2006
Page 2

If there are any questions regarding this project, please feel free to contact me.

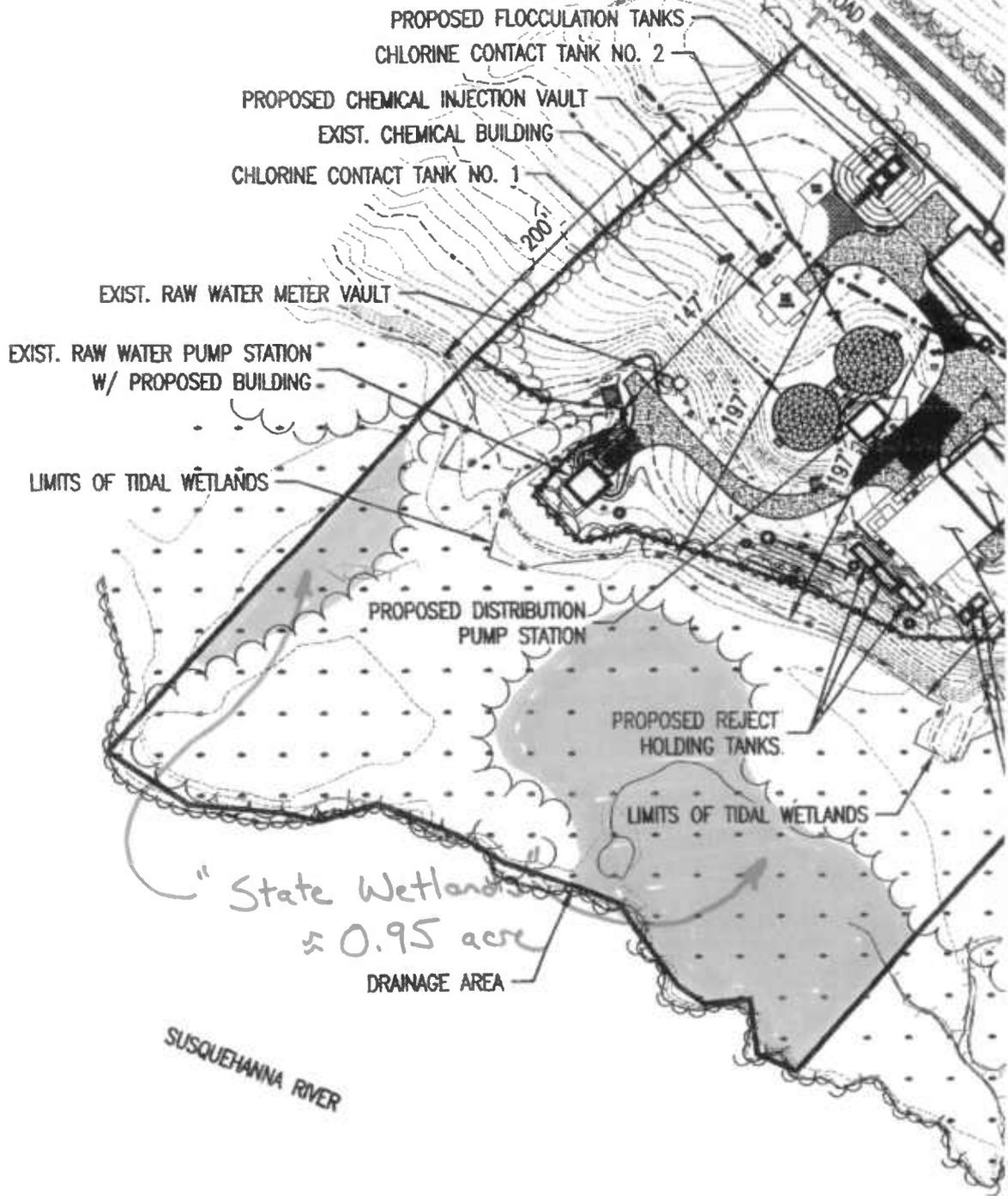
Sincerely,

VORTEX ENVIRONMENTAL

A handwritten signature in black ink, appearing to read "Bradley J. Gochner", with a long horizontal flourish extending to the right.

Bradly J. Gochner
President

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URS

1200 Philadelphia Pike
 Wilmington, DE 19809
 Tel: 302.791.0700
 Fax: 302.791.0708





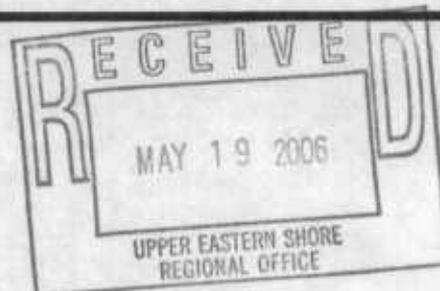
Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

May 16, 2006

Ms. Mary Ann Skilling
Maryland Department of Planning
Upper Eastern Shore Regional Office
120 Broadway, Suite 10
Centreville, MD 21617-1000



RE: Environmental Review for Town of Perryville Upgrade to Water and Wastewater Treatment Plant, Cecil County, Maryland.

Dear Ms. Skilling:

The Wildlife and Heritage Service has determined that there is a Habitat Protection Area (HPA) known to occur along the shoreline of the Susquehanna River on this project site. This HPA was designated for the presence of Maryland Bur-marigold (*Bidens bidentoides* var. *mariana*) that occurs in very close proximity to the project site, in this HPA. Maryland Bur-marigold is not currently listed in Maryland, and has a current state status of Watchlist.

It is also important to note that the portion of the shoreline that occurs on this project site is designated in state regulations as a Wetland of Special State Concern (WSSC) and regulated by Maryland Department of the Environment. Your project may need to be reviewed by Maryland Department of the Environment for any necessary wetland permits associated with the WSSC.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2006.0709.ce
Cc: D. Brinker, WHS
R. Esslinger, CAC



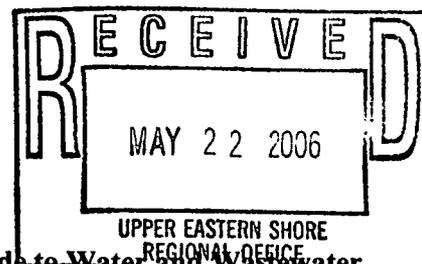
Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

May 16, 2006

Ms. Mary Ann Skilling
Maryland Department of Planning
Upper Eastern Shore Regional Office
120 Broadway, Suite 10
Centreville, MD 21617-1000



RE: Environmental Review for Town of Port Deposit Upgrade to Water and Wastewater Treatment Plant, Cecil County, Maryland.

Dear Ms. Skilling:

The Wildlife and Heritage Service has determined that there are no records for rare, threatened or endangered plants or animals known to occur on this project site. However, the portion of the Susquehanna River into which this site drains, is known to support RT&E mussels, fish and other aquatic species. Any plans should take into consideration the potential for adverse impacts to these species in the area of the project site, and utilize all appropriate BMPs during work.

It is also important to note that our analysis of the information provided also suggests that the forested area on the project site contains Forest Interior Dwelling Bird habitat. Populations of many Forest Interior Dwelling Bird species (FIDS) are declining in Maryland and throughout the eastern United States. The conservation of this habitat is mandated within the Critical Area and must be addressed by the project plan. Specifically, if FIDS habitat is present, the following guidelines should be incorporated into the project plan:

1. Restrict development to nonforested areas.
2. If forest loss or disturbance is unavoidable, concentrate or restrict development to the following areas:
 - a. the perimeter of the forest (i.e., within 300 feet of existing forest edge)
 - b. thin strips of upland forest less than 300 feet wide
 - c. small, isolated forests less than 50 acres in size
 - d. portions of the forest with low quality FIDS habitat, (i.e., areas that are already heavily fragmented, relatively young, exhibit low structural diversity, etc.)
3. Roads and driveways should be as narrow and as short as possible; preferably less than 25 and 15 feet, respectively
4. Maintain forest canopy closure over roads and driveways.
5. Maintain forest habitat up to the edges of roads and driveways; do not create or maintain mowed grassy berms.
6. Maintain or create wildlife corridors.
7. Do not remove or disturb forest habitat during April-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.
8. Afforestation efforts should target a) riparian or streamside areas that lack woody vegetative buffers, b) forested riparian areas less than 300 feet wide, and c) gaps or peninsulas of nonforested habitat within or adjacent to existing FIDS habitat.

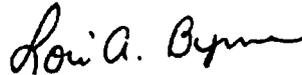
Tawes State Office Building • 580 Taylor Avenue • Annapolis, Maryland 21401

410.260.8DNR or toll free in Maryland 877.620.8DNR • www.dnr.maryland.gov • TTY users call via Maryland Relay

The Critical Area Commission's document "A Guide to the Conservation of Forest Interior Dwelling Birds in the Chesapeake Bay Critical Area" provides details on development standards and information about mitigation for projects where impacts to FIDS habitat cannot be totally avoided. Mitigation plantings for impacts to FIDS habitat may be required under the local government's Critical Area Program. The amount of mitigation required is generally based in whether or not the guidelines listed above are followed.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,



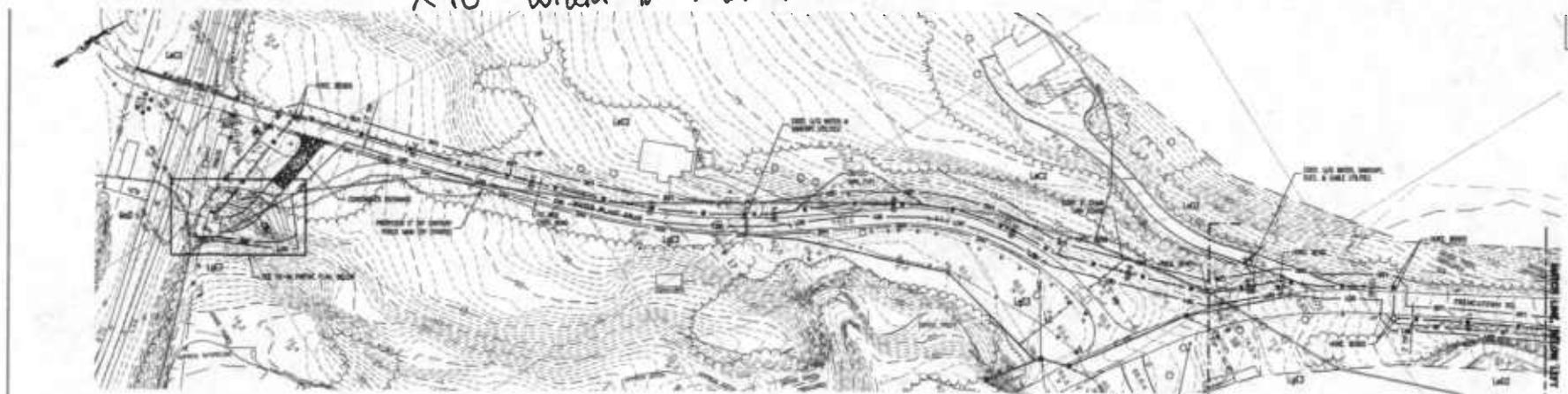
Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2006.0710.ce
Cc: D. Brinker, WHS
R. Esslinger, CAC

760 ft - out of Buffer
 X 10' width for limit of disturbance

120' in stream Buffer
 X 10

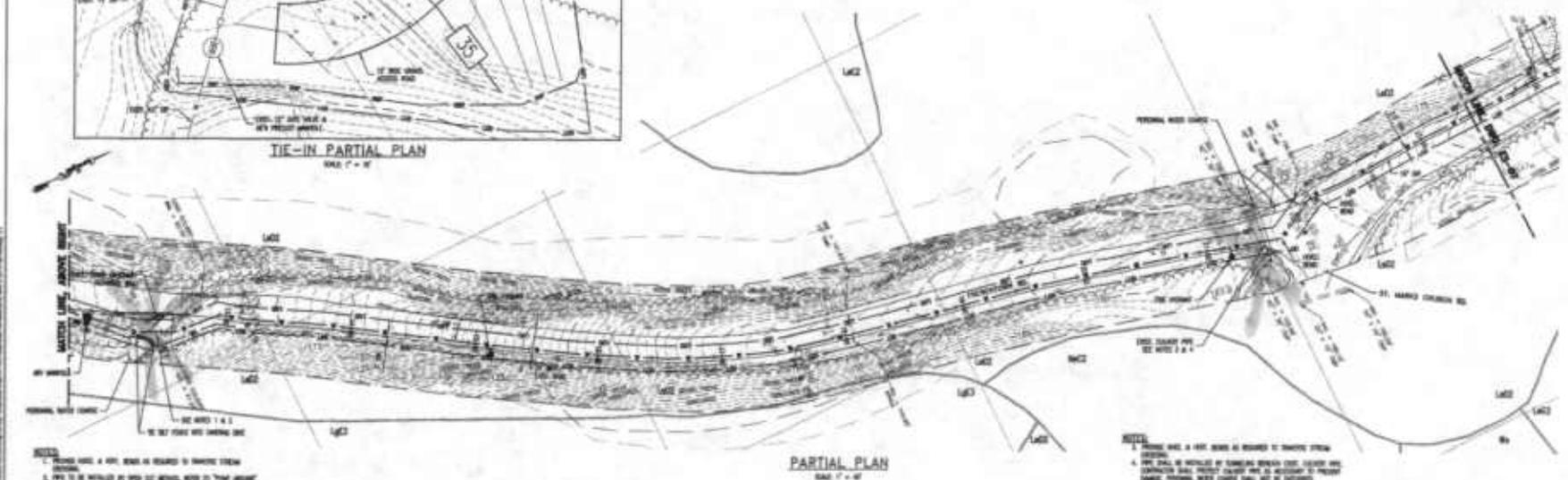
CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST PROFESSIONAL SURVEY AND SHALL BE TO THE FULL SCALE AND ACCURACY INDICATED ON THE DRAWINGS.



PARTIAL PLAN
 SCALE 7" = 40'



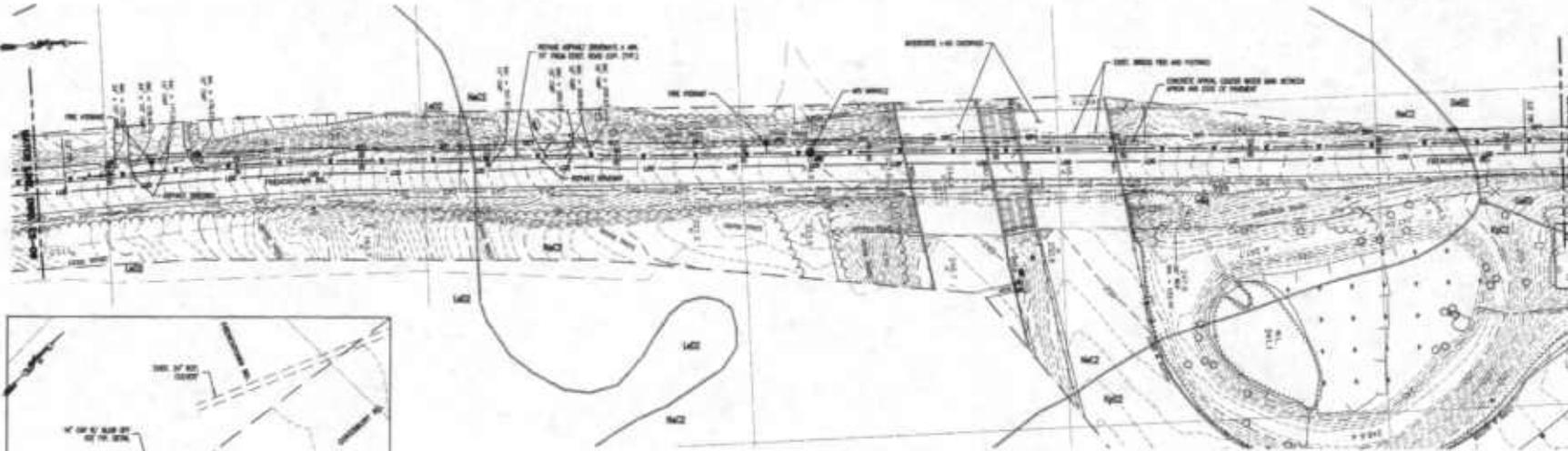
TIE-IN PARTIAL PLAN
 SCALE 7" = 40'



PARTIAL PLAN
 SCALE 7" = 40'

				1200 Piedmont Pike Washington, DC 20002 Tel: 302.741.5700 Fax: 302.741.5706	SHEET NO. 08 OF 11	EROSION AND SEDIMENT CONTROL SITE PLAN		ES-06 SHEET NO. 08 OF 11
						THE TOWN OF PERRYVILLE PERRYVILLE WATER DISTRIBUTION SYSTEM IMPROVEMENTS PERRYVILLE, MARYLAND		

CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT APPLICABLE SAFETY AND HEALTH ACT AND ALL RULES AND REGULATIONS THEREOF AND SUBSEQUENT.

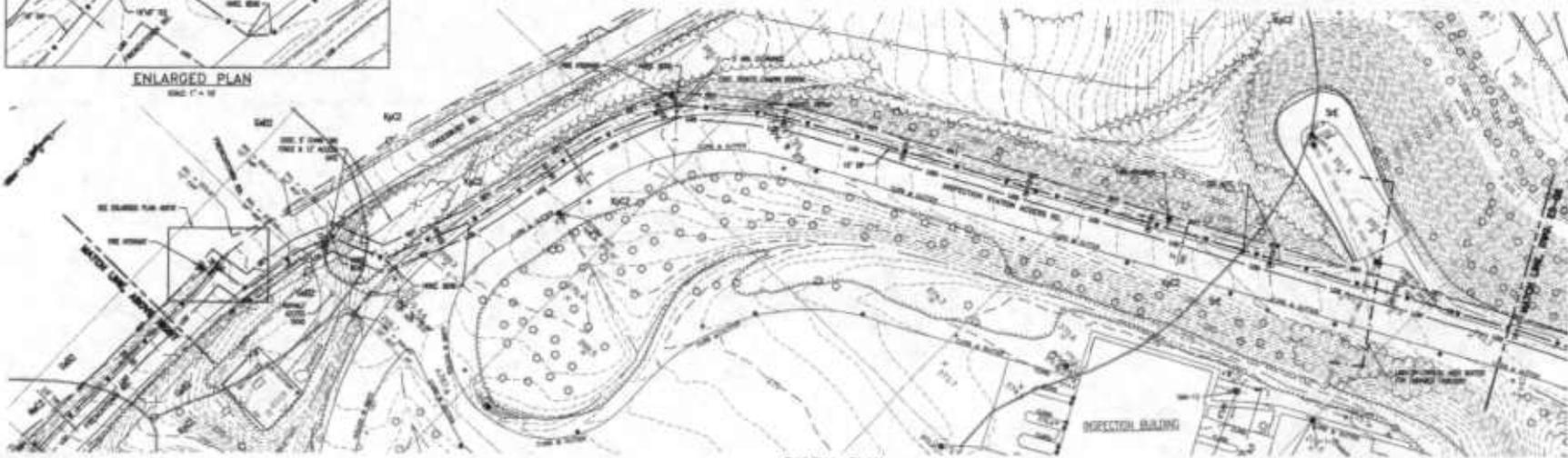


PARTIAL PLAN
SCALE: 1" = 40'



ENLARGED PLAN
SCALE: 1" = 10'

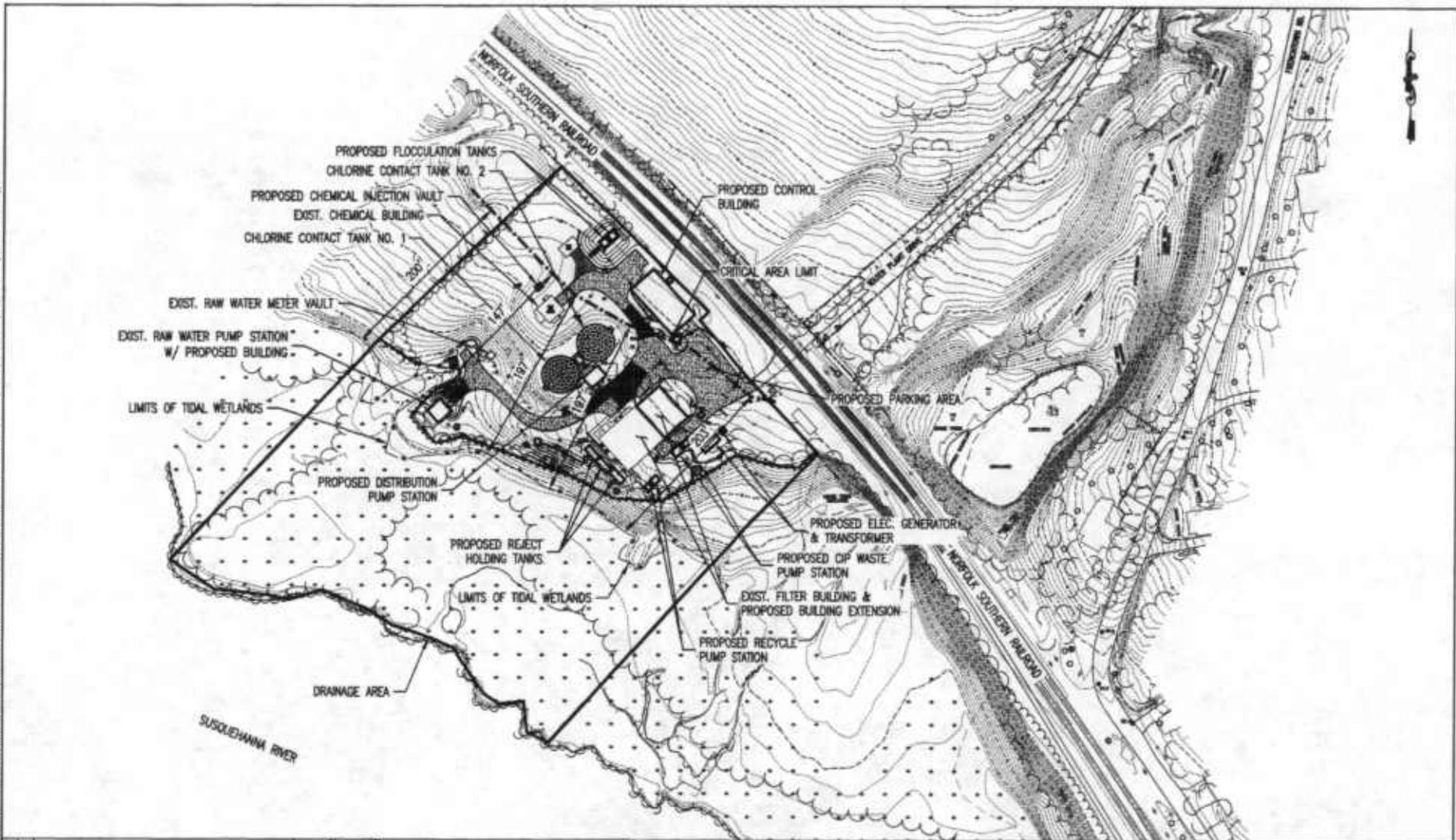
NOTES:
1. ALL WORK SHOWN AND DESIGNED THAT ARE REQUIRED FOR THE CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT APPLICABLE SAFETY AND HEALTH ACT AND ALL RULES AND REGULATIONS THEREOF AND SUBSEQUENT.



PARTIAL PLAN
SCALE: 1" = 40'

				ACEC <small>AMERICAN CONSULTANTS & ENGINEERS, INC.</small>	URS <small>1200 Philadelphia Pike Wilmington, DE 19804 Tel: 302.791.2100 Fax: 302.791.2108</small>		EROSION AND SEDIMENT CONTROL SITE PLAN THE TOWN OF FERRYVILLE FERRYVILLE WATER DISTRIBUTION SYSTEM IMPROVEMENTS FERRYVILLE, MARYLAND	B SHEET NO. 08-07 SHEET 1 OF 11

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1200 Philadelphia Pike
 Wilmington, DE 19809
 Tel: 302.791.0700
 Fax: 302.791.0708



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DATE	2/14/06

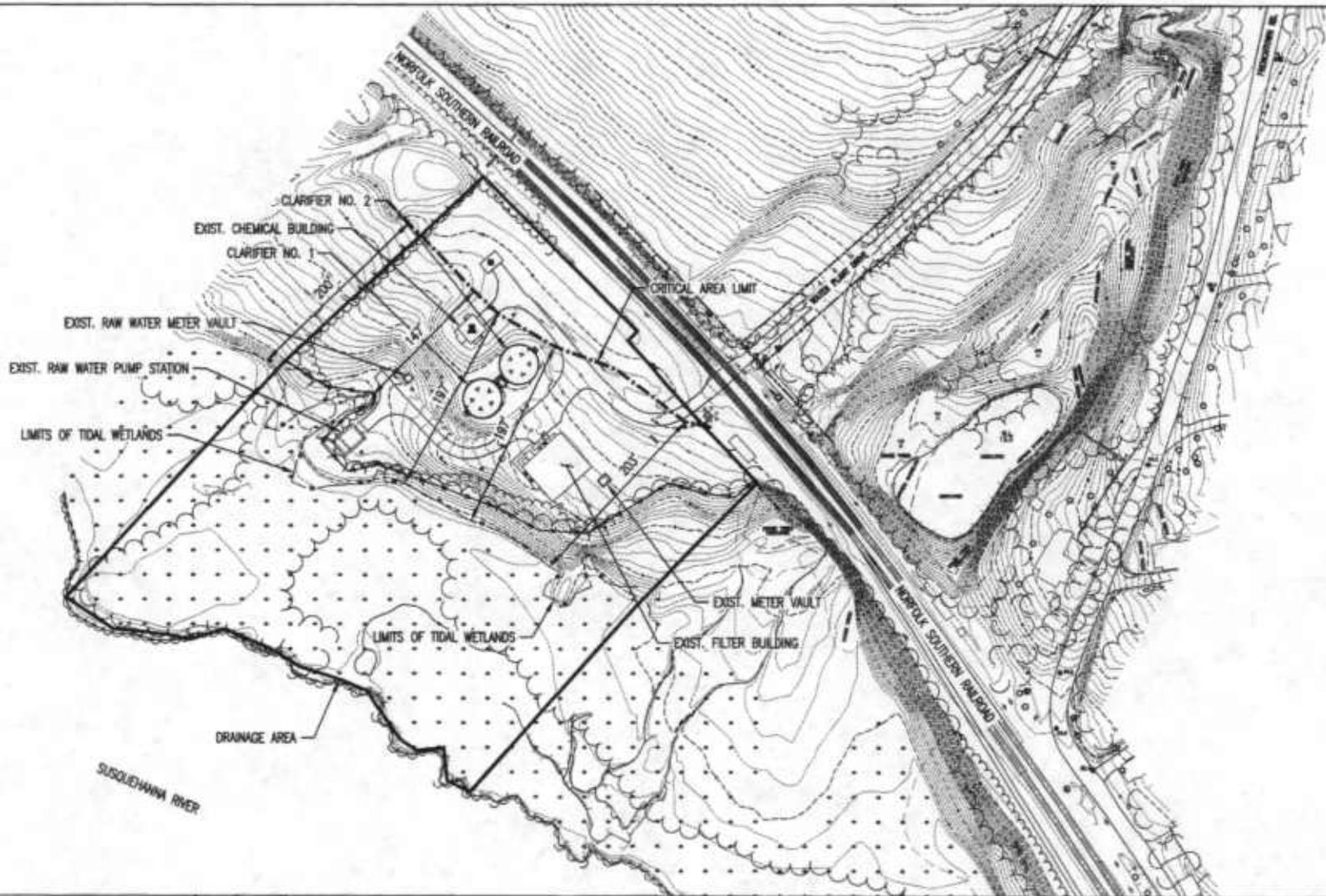
DRAINAGE AREA PLAN - POST DEVELOPMENT

THE TOWN OF PERRYVILLE
PERRYVILLE WATER TREATMENT PLANT IMPROVEMENTS

CECL COUNTY, MARYLAND

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 Fax: 302.791.0708



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DRAINAGE AREA PLAN - PRE DEVELOPMENT

THE TOWN OF PERRYVILLE
PERRYVILLE WATER TREATMENT PLANT IMPROVEMENTS

CECIL COUNTY, MARYLAND

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PROJECT	20712762
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