

MSA. S. 1829-5688

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. William Watson
P O Box 400
Chesapeake Beach, MD 20732

Re: Chesapeake Beach Wastewater Treatment Plant Upgrades
Shellfish Protection Pond

Dear Mr. Watson:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On December 6, 2006, the Critical Area Commission unanimously approved the Town's proposal to construct a 10,000 square foot shellfish protection pond and to install an additional sequencing batch reactor. This approval included the following condition:

1. Prior to commencement of construction, the Town shall obtain the necessary erosion and sediment control authorization from the Calvert County Soil Conservation District.

In fulfillment of the above condition, please provide Commission staff with a copy of the appropriate permit once it has been obtained. 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.

In considering the Town's request, the Program Subcommittee discussed in detail whether the designation of RCA on the wastewater treatment plant site was appropriate given the intense use currently on the site and the future improvements planned. I will contact you to discuss this further.

Should you have any questions about the Commission's approval of the project, please feel free to contact me at 410-260-3482.

Sincerely,

A handwritten signature in cursive script that reads "Kerrie Gallo".

Kerrie L. Gallo
Natural Resource Planner

Cc: Cynthia Lane, Stearns & Wheeler



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

August 15, 2006

STEARNS & WHEELER

AUG 21 2006

Ms. Cynthia A. Lane
Stearns & Wheeler, LLC
Bowie New Town Center
4201 Northview Drive, Suite 404
Bowie, MD 20716

RE: Environmental Review for Shellfish Protection Tank and Interim Extension for the Town of Chesapeake Beach Wastewater Treatment Plant, S&W No. 40082.32, Calvert County, Maryland.

Dear Ms. Lane:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted. It is also important to note that the utilization of state funds, or the need to obtain a state authorized permit may warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. If this project falls into one of these categories, please contact us for further coordination.

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. Maximize the amount of forest "interior" (forest area >300 feet from the forest edge) within each forest tract (i.e., minimize the forest edge:area ratio). Circular forest tracts are ideal and square tracts are better than rectangular or long, linear forests.
4. Minimize forest isolation. Generally, forests that are adjacent, close to, or connected to other forests provide higher quality FIDS habitat than more isolated forests.
5. Limit forest removal to the "footprint" of houses and to that which is necessary for the placement of roads and driveways.
6. Minimize the number and length of driveways and roads.

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

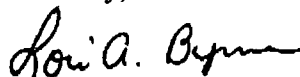
August 15, 2006

7. Roads and driveways should be as narrow and as short as possible; preferably less than 25 and 15 feet, respectively
8. Maintain forest canopy closure over roads and driveways.
9. Maintain forest habitat up to the edges of roads and driveways; do not create or maintain mowed grassy berms.
10. Maintain or create wildlife corridors.
11. 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.
12. Landscapè homes with native trees, shrubs and other plants and/or encourage homeowners to do so.
13. Encourage homeowners to keep pet cats indoors or, if taken outside, kept on a leash or inside a fenced area.
14. In forested areas reserved from development, promote the development of a diverse forest understory by removing livestock from forested areas and controlling white-tailed deer populations. Do not mow the forest understory or remove woody debris and snags.
15. 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.

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 #2006.1623.ct
Cc: R. Esslinger, CAC

Critical Area Commission

STAFF REPORT

December 6, 2006

APPLICANT: Town of Chesapeake Beach

PROPOSAL: Shellfish Protection Pond and Interim Expansion of Wastewater Treatment Plan

JURISDICTION: Chesapeake Beach

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Conditional Approval with Condition

STAFF: Kerrie Gallo

**APPLICABLE LAW/
REGULATIONS:** COMAR 27.02.06 Conditional Approval of State or Local Agency Programs in the Critical Area

Discussion

The Town of Chesapeake Beach is proposing to construct a 10,000 square foot shellfish protection tank, as well as to construct a Sequencing Batch Reactor (SBR) within the proposed tank. The purpose of the improvements is to provide emergency storage of influent flow and to provide adequate treatment of the influent as the Town prepares for an upgrade in plant capacity and in Enhanced Nutrient Removal (ENR). The shellfish protection pond is required by the Maryland Department of the Environment as the wastewater treatment plant discharges effluent to shellfish harvesting waters. Currently, the wastewater treatment plant does not have a mechanism to control or capture overflows.

The wastewater treatment plant is located on Bayside Road within the Town of Chesapeake Beach. The parcel, 5.15 acres in size, is located within the Resource Conservation Area (RCA). As over 75% of the site is encompassed within the 100-foot Buffer, a significant portion of the existing wastewater treatment plant is located within the Buffer. Currently, the site is developed with 43,900 square feet (19.57%) of impervious cover. Upon completion of the proposed improvements, the site will consist of 56,150 square feet of impervious cover (25.07%). As a result of the Buffer impacts, impacts to FIDS habitat, and the proposal to further exceed the 15% impervious surface area limit within the RCA, the project requires a conditional approval from the Commission, as outlined within COMAR 27.02.06.

Proposal

The proposed improvements include multiple components:

- Installation of a 10,000 square foot shellfish protection holding tank;
- Influent and Effluent Flow Control Vaults; these vaults contain the valves that control the wastewater flow to and from the shellfish protection pond or the SBR. There will also be pipe trenches installed in order for the vaults and valves to function;
- Distribution Box No. 2; The existing distribution box is being modified to allow effluent from the SBR to combine with the main treatment plant before proceeding to disinfection; and
- Construction of the SBR; This will be constructed inside of the shellfish protection pond and will provide additional treatment for the anticipated increase in plant capacity associated with growth within the Town and County, as well as with the mandates of the ENR requirements.

In order to construct the proposed improvements, a 0.78 acre limit of disturbance is proposed. Approximately 7,960 square feet (0.182 acres) of this disturbance is located within the RCA, but outside of the 100-foot Buffer within an area of grass and gravel cover. No mitigation is required for impacts to the areas. Town representatives will attend the Project Subcommittee meeting to discuss stormwater management for the project. The impacts to the Buffer are discussed below.

Habitat Protection Areas (HPAs)

As previously mentioned, approximately 75% of the wastewater treatment site is encompassed by the 100-foot Buffer. As such, a significant portion of the proposed improvements will impact the Buffer. In addition, portions of the site contain habitat suitable for Forest Interior Dwelling Birds (FIDs). There will be 2,800 square feet of clearing within FIDs habitat required for construction of the project. Aside from these two HPAs, there are no other known HPAs on the site.

In order to mitigate for impacts to the Buffer and to FIDs habitat, the Town is proposing to utilize the fee-in-lieu program. The existing wastewater treatment plant is heavily developed, with little room to provide onsite plantings. Collection of fees-in-lieu will allow the Town to provide a comprehensive planting and environmental restoration effort at an alternative location in the Town. However, mitigation for impacts to FIDs habitat requires the applicant to provide direct plantings and creation of alternative FIDs habitat for the area of direct forest loss. For this reason, the fees-in-lieu associated with impacts to FIDs habitat are collected and tracked separately from general Buffer impact fees. The impacts and associated mitigation ratios are summarized below. For impacts to FIDs habitat, fees will be collected at a rate of \$2.50 per square foot for a total fee of \$7,000. For impacts to the Buffer, fees will be collected at a rate of \$2.50 per square foot for a total fee of \$158,525.

Area	Area Site of Disturbance (sf)	Mitigation Requirements	Area of Mitigation	
			(sf)	(acre)
Construction in RCA, outside of the Buffer	7,960	None	0.00	0.00

*Construction in RCA, within the Buffer – Direct FIDS Impacts	2,800	1:1	2,800	0.06
*Construction in RCA, within the Buffer- Within FIDS Habitat	2,800	2:1	5,600	0.13
Construction within the RCA, within the Buffer – No FIDS Habitat	19,270	3:1	57,810	1.33
Total – FIDS Mitigation			2,800	0.06
Total – Buffer Mitigation			63,410	1.46

* Total clearing within the Buffer **and** within FIDs habitat is 2,800 square feet. These rows were separated to distinguish between and to provide a separate tracking mechanism for the 1:1 mitigation required for direct FIDs impacts, and the remainder of the 2:1 mitigation for impacts to the Buffer within FIDs habitat.

Conditional Approval Process

A conditional approval is necessary for the proposed impacts to the 100-foot Buffer and to FIDS habitat, and to further exceed the 15% impervious surface limit in Resource Conservation Areas.

The responses below were provided by the applicant.

B. (1) That there exist special features of the site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

Special features exist on the site such that a literal enforcement of these regulations would prevent the project from being implemented. The area required for the project is a direct result of the Maryland Department of the Environment's (MDE) regulations regarding the protection of the water from pollution resulting from wastewater overflows. Specifically, the Town must construct a Shellfish Protection Holding Tank for the diversion of peak wastewater influent flows to minimize potential overflows. The size of the tank and the ancillary structures are dictated by MDE's regulations.

The uplands portion of the project site is 5.15 acres±. This site also contains the present wastewater treatment facilities, serving parts of Anne Arundel and Calvert Counties, and the Towns of North and Chesapeake Beaches, and Chesapeake Beach's Public Works Garage. Presently the site is approximately 20% wooded. The entire site is located within the Resource Conservation Area of the Critical Area and over 75% of the site is located within the Critical Area Buffer.

B. (2) That the project or program otherwise provides substantial public benefits to the Critical Area Program;

In addition to the project benefiting the public welfare substantially by providing improved water quality to the Chesapeake Bay and minimizing public health concerns by minimizing the potential occurrence of overflows, the project provides public benefits to the Critical Area Program. The benefits to the Critical Area Program are as follows:

While not controlled by the Critical Area Program, the pollutants removed by the implementation of the Shellfish Protection Holding Tank will contribute significantly to improving the water quality of the Chesapeake Bay, the prime goal of the Critical Area Program.

Through the proposed mitigation, FIDS habitat will be enhanced. The use of fees-in-lieu to plant additional forest in a FIDS habitat area at a ratio of 1:1 will significantly offset the impact of the marginal loss of trees on the perimeter of the woods in the project area. The FIDS habitat disturbed is 2,800 square feet and will be mitigated at 1:1 or 2,800 square feet.

Additional mitigation will be provided through the use of fees-in-lieu for construction in the buffer. The area within the buffer is 22,070 square feet, including 2,800 square feet of FIDS habitat that was discussed previously. This entire area will be mitigated at a 3:1 ratio. The mitigation is split as follows: 1:1 mitigation for direct impacts to FIDS habitat within the Buffer and 2:1 mitigation for remaining impacts to the Buffer within FIDS habitat.

B. (3) That the project or program is otherwise in conformance with this subtitle;

The project is in conformance with the subtitle, other than the request to construct the new Shellfish Protection Holding Tank within the Buffer and a slight amount (2,800 square feet±) of FIDS habitat to be cleared. The proposed clearing is also located within the Critical Area Buffer.

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

C. (1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State of local agency program or project;

The literal enforcement of the provisions of this subtitle would prevent the Town Shellfish Protection Holding Tank project from being implemented to meet the requirements of the MDE. Ultimately, the lack of implementation of the project would contribute to additional pollution of the Chesapeake Bay caused by overflows of the treatment facilities on heavy rain and/or flooding events.

C. (2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05;

It is anticipated that the Critical Area Commission, at their December 6, 2006 meeting, will approve the "Forest and Developed Woodland Master Plan for the Town of Chesapeake Beach". The Mayor and Town Council of Chesapeake Beach adopted (subject to Critical Area Commission Approval) this plan on Thursday November 16, 2006.

There are several components of this plan (all citations are from the proposed Forest and Developed Woodland Master Plan for the Town of Chesapeake Beach), which are applicable to this project:

Article 4-404 (f) (1) – *"Mitigation for disturbance within the buffer associated with development activity... shall be provided for the area disturbed at three-to-one"*.

The proposed disturbances and their attendant mitigation ratios are itemized as follows:

FIDS Habitat Clearing in the Buffer - 2,800 Square Feet to be mitigated at 1:1

Disturbance in the Buffer – 19,270 Square Feet to be mitigated at 3:1; 2,800 Square Feet mitigated at 2:1

Article 4-411 creates a Fees-in-lieu of Mitigation Program. Paragraph E. establishes categories on which the fees-in-lieu may be spent.

Paragraph i. a) identifies *"Costs directly related to planting trees, shrubs, and other vegetative materials; reforestation; afforestation; non-structural and structural improvements to stormwater management facilities and systems to treat or otherwise improve the quality of waters entering the Chesapeake Bay and its tributaries, streams and wetlands; any other projects included in a Forest Plan or update thereof which has been jointly adopted by the Town and the Critical Area Commission."*

Paragraph i) d) states "*Fees collected in lieu of mitigation for the impact to Forest Interior Dwelling Bird (FIDS) habitats must be spent on areas qualifying for FIDS mitigation, in accordance with the Critical Area Commission's Guide to the Conservation of Forest Interior Dwelling Birds in the Critical Area, June 2000.*"

Paragraph F. establishes the Amount of fee as "*The required fee-in-lieu shall be paid at a rate of \$1.25 per square foot of required mitigation for private development projects and 2.50 per square foot for public development projects.*"

C. (3) Measures proposed to mitigate adverse effects of the project or program or an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

To mitigate the impacts caused by this project, the Town proposes that fees-in-lieu be paid as follows:

1. For the FIDS mitigation requirement of 2,800 square feet at the rate of \$2.50 per square foot or \$7,000.00.
2. For the buffer disturbance requirement of 63,410 square feet at the rate of \$2.50 per square foot or \$158,525.00.

These fees will be used to plant qualifying vegetation at Critical Area Commission approved locations, with the first priority being within the immediate vicinity of the project.

The Commission shall approve, deny, or request modifications to the request for conditional approval based on the following factors:

(1) The extent to which the project or program 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 or program; and

(3) The extent to which the project or program, including any mitigation measures, provides substantial public benefits to the overall Critical Area Program.

Staff Recommendation

Commission staff recommends that this project be approved with the following condition:

1. The Town of Chesapeake Beach shall obtain the appropriate Sediment and Erosion Control permits from the Maryland Department of the Environment prior to the commencement of construction activities.

3.1 Summary of Disturbed Area

Table 1 summarizes the amount of disturbed area and the mitigation requirements that are anticipated for the Shellfish Protection Tank and Interim Expansion project. All tree removal for this project occurs within the Buffer.

Table 1: Disturbed Area and Mitigation Requirements

Area	Area Site of Disturbance (sf)	Mitigation Requirements	Area of Mitigation	
			(sf)	(acre)
Construction within the RCA, outside of the Buffer ⁽¹⁾	7,960	None	0.00	0.00
Construction within the RCA, within the Buffer – FIDS Habitat ⁽²⁾	2,800	1:1	2,800	0.06
	2,800	2:1	5,600	0.13
Construction within the RCA, within the Buffer – No FIDS Habitat ⁽³⁾	19,270	3:1	57,810	1.33
Total – FIDS Mitigation	2,800		2,800	0.06
Total – Buffer Mitigation	30,030		63,410	1.46

- (1) No trees will be removed in the area outside of the Buffer.
- (2) All FIDS habitat is located within the Buffer.
- (3) FIDS habitat disturbance is not included in this item.

As detailed in Table 1 above, approximately 7,960 square feet of disturbed area is located outside of the Buffer that is part of the RCA. The disturbed area consists of a new road for vehicle access and several pipe trenches. No mitigation is required for this disturbance as no tree removal is occurring in this area. Approximately 22,070 square feet of disturbed area is located within the Buffer that is part of the RCA however approximately 2,800 square feet of this area included FIDS habitat. The disturbed area consists of the excavation needed to construct Shellfish Protection Tank and two valve vaults as well as the pipe trenches needed to install the yard piping. Some new grading of the site will also occur.

The following are the responses of the applicant:

B. (1) That there exist special features of the site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

Special features exist on the site such that a literal enforcement of these regulations would prevent the project from being implemented. The area required for the project is a direct result of the Maryland Department of the Environment's (MDE) regulations regarding the protection of the water from pollution resulting from wastewater overflows. Specifically, the Town must construct a Shellfish Protection Holding Tank for the diversion of peak wastewater influent flows to minimize potential overflows. The size of the tank and the ancillary structures are dictated by MDE's regulations.

The uplands portion of the project site is 5.15 acres±. This site also contains the present wastewater treatment facilities, serving parts of Anne Arundel and Calvert Counties, and the Towns of North and Chesapeake Beaches, and the Chesapeake Beach's Public Works Garage. Presently the site is approximately 20% wooded. The entire site is located within the Resource Conservation Area of the Critical Area and over 75% of the site is located within the Critical Area Buffer.

B. (2) That the project or program otherwise provides substantial public benefits to the Critical Area Program;

In addition to the project benefiting the public welfare substantially by providing improved water quality to the Chesapeake Bay and minimizing public health concerns by minimizing the potential occurrence of overflows, the project provides public benefits to the Critical Area Program. The benefits to the Critical Area Program are as follows:

While not controlled by the Critical Area Program, the pollutants removed by the implementation of the Shellfish Protection Holding Tank will contribute significantly to improving the water quality of the Chesapeake Bay, the prime goal of the Critical Area Program.

Through the proposed mitigation, FIDS habitat will be enhanced. The use of fees-in-lieu to plant additional forest in a FIDS habitat area at a ratio of 1:1 will significantly offset the impact of the marginal loss of trees on the perimeter of the woods in the project area. The FIDS habitat disturbed is 2,800 square feet and will be mitigated at 1:1 or 2,800 square feet.

Additional mitigation will be provided through the use of fees-in-lieu for construction in the buffer. The area within the buffer is 22,070 square feet, including 2,800 square feet of FIDS habitat that was discussed previously. This entire area will be mitigated at a 3:1 ratio, however the FIDS habitat area (2,800 square feet) can be mitigated at a 2:1 ratio as the mitigation performed for FIDS habitat can be applied towards the 3:1 mitigation ratio. The total mitigation for these two areas is 63,410 square feet.

B. (3) That the project or program is otherwise in conformance with this subtitle;

The project is in conformance with the subtitle, other than the request to construct the new Shellfish Protection Holding Tank within the Buffer and a slight amount (2,800 square feet±) of FIDS habitat to be cleared. The proposed clearing is also located within the Critical Area Buffer.

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

C. (1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State of local agency program or project;

The literal enforcement of the provisions of this subtitle would prevent the Town Shellfish Protection Holding Tank project from being implemented to meet the requirements of the MDE. Ultimately, the lack of implementation of the project would contribute to additional pollution of the Chesapeake Bay caused by overflows of the treatment facilities on heavy rain and/or flooding events.

C. (2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05;

It is anticipated that the Critical Area Commission, at their December 6, 2006 meeting, will approve the "Forest and Developed Woodland Master Plan for the Town of Chesapeake Beach". It is also anticipated that the Mayor and Town Council of Chesapeake Beach will tentatively adopt (subject to Critical Area Commission Approval) this plan on Thursday November 16, 2006.

There are several components of this plan (all citations are from the proposed Forest and Developed Woodland Master Plan for the Town of Chesapeake Beach), which are applicable to this project:

Article 4-404 (f) (1) – *"Mitigation for disturbance within the buffer associated with development activity... shall be provided for the area disturbed at three-to-one"*.

The proposed disturbances and their attendant mitigation ratios are itemized as follows:

FIDS Habitat Clearing in the Buffer - 2,800 Square Feet to be mitigated at 1:1
Disturbance in the Buffer – 19,270 Square Feet to be mitigated at 3:1; 2,800 Square Feet mitigated at 2:1

Article 4-411 creates a Fees-in-lieu of Mitigation Program. Paragraph E. establishes categories on which the fees-in-lieu may be spent.

Paragraph i. a) identifies *"Costs directly related to planting trees, shrubs, and other vegetative materials; reforestation; afforestation; non-structural and structural*

improvements to stormwater management facilities and systems to treat or otherwise improve the quality of waters entering the Chesapeake Bay and its tributaries, streams and wetlands; any other projects included in a Forest Plan or update thereof which has been jointly adopted by the Town and the Critical Area Commission."

Paragraph i) d) states "*Fees collected in lieu of mitigation for the impact to Forest Interior Dwelling Bird (FIDS) habitats must be spent on areas qualifying for FIDS mitigation, in accordance with the Critical Area Commission's Guide to the Conservation of Forest Interior Dwelling Birds in the Critical Area, June 2000.*"

Paragraph F. establishes the Amount of fee as "*The required fee-in-lieu shall be paid at a rate of \$1.25 per square foot of required mitigation for private development projects and 2.50 per square foot for public development projects.*"

C. (3) Measures proposed to mitigate adverse effects of the project or program or an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

To mitigate the impacts caused by this project, the Town proposes that fees-in-lieu be paid as follows:

1. For the FIDS mitigation requirement of 2,800 square feet at the rate of \$2.50 per square foot or \$7,000.00.
2. For the buffer disturbance requirement of 63,410 square feet at the rate of \$2.50 per square foot or \$158,525.00.

These fees will be used to plant qualifying vegetation at Critical Area Commission approved locations, with the first priority being within the immediate vicinity of the project.

Town of Chesapeake Beach, MD Shellfish Holding Tank Project

FIDS Conservation Worksheet

Totals for 2 parcels

Parcel Size	5.15	acres
Critical Area Acreage	5.15	acres

Existing

Forest Cover	1.03	total contiguous acres
Forest Cover	1.03	total acres in CA
FIDS Habitat	1.03	total acres in CA (based on FIDS survey)
FIDS Interior	0.00	acres CA (based on not being able to meet the criteria of within 300 ft of edge and being upland)

Post Development

Forest Cover	0.96	total acres in CA
FIDS Habitat	0.96	total acres in CA
Interior Habitat Remaining	not applicable	total acres in CA

Percent Forest Pre Development 20%

Percent Forest Post Development 19%

12. Landscape homes with native trees, shrubs and other plants and/or encourage homeowners to do so.
13. Encourage homeowners to keep pet cats indoors or, if taken outside, kept on a leash or inside a fenced area.
14. In forested areas reserved from development, promote the development of a diverse forest understory by removing livestock from forested areas and controlling white-tailed deer populations. Do not mow the forest understory or remove woody debris and snags.
15. 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.

APPENDIX D

FIDS CONSERVATION WORKSHEET

Parcel size

5.15 +/- total acreage

5.15 +/- Critical Area acreage

Existing

Forest cover	<u>1.03 +/-</u>	total contiguous acreage
Forest cover	<u>1.03 +/-</u>	total acres CA
FIDS habitat*	<u>1.03 +/-</u>	total acres CA
FIDS interior	<u>- 0 -</u>	acres CA

Calculate interior by subtracting out a 300 ft. edge.**

If available: _____ acreage of contiguous forest area both
in _____
and out of the CA within a 3-mile
radius.

Post development

Forest cover	<u>0.96 +/-</u>	total acres CA
FIDS habitat	<u>0.96 +/-</u>	total acres CA
Interior habitat remaining	<u>Not Applicable</u>	acres CA
Interior acreage		

***How to Identify FIDS Habitat**

Assume FIDS habitat is present if a forest meets either of the following minimum conditions:

Forests at least 50 acres in size with 10 or more acres of forest interior (see below to calculate interior) habitat. The majority of the forest tracts should be dominated by pole-sized or larger trees (5 inches or more in diameter at breast height), or have a closed canopy; or

Riparian forests at least 50 acres in size with an average total width of at least 300 feet. The stream within the riparian forest should be perennial, based on field surveys or as indicated on the most recent 7.5 minute USGS topographic maps. The majority of the forest tracts should be dominated by pole-sized or larger trees, or have a closed canopy.

In lieu of using the above criteria for determining if FIDS habitat is present, a FIDS survey may be done by a qualified FIDS observer. See page 12 of the Guidance Document for the procedures to be followed. You may contact the Maryland Department of Natural Resources, Forest Wildlife Divisions or the Critical Area Commission for a list of qualified observers.

****How to Measure the amount of forest interior and forest edge**

To determine the amount of interior in a forest, the edge of 300 feet is subtracted from the total contiguous forest. The area left is forest interior provided it is at least ten acres in size.

When measuring forest edge, do not include natural forest edges such as those adjacent to open water, nonforested wetlands and streams. Riparian forests of 300 feet or greater are considered interior habitat when calculating FIDS habitat in the Critical Area provided that they have a minimum of 50 contiguous acres or are connected to a forest that has been determined to be FIDS habitat.

Please answer the following questions regarding the FIDS Site Design Guidelines and how they were applied to the project.

1. Has development (e.g., house, septic reserve areas, driveway) been restricted to nonforested areas? Yes ___ No

If no, explain

IT HAS BEEN RESTRICTED TO THE GREATEST EXTENT POSSIBLE - APPROX 2800 SF OF FORESTED AREA WILL BE IMPACTED.

2. If development has not been restricted to nonforested areas, has development been restricted to:
- a. perimeter of the forest within 300 feet of the forest edge? Yes No ___
- b. thin strips of upland forest less than 300 feet wide? Yes No ___
- c. isolated forests less than 50 acres in size? Yes No ___
- d. portions of the forest with low quality FIDS habitat, (e.g., areas that are heavily fragmented, relatively young, exhibit low structural diversity, etc.)? - RESTRICTED TO EDGE. Yes ___ No ___

3. Have new lots been restricted to existing nonforested areas and/or forests as described in #2 above? NOT APPLICABLE Yes ___ No ___

If no, please explain how property owners will be prevented

from clearing in the FIDS habitat on their property (i.e., protective covenants/easements)?

NOT APPLICABLE

4. Will forest removal be limited to the footprint of the house and

that which will be necessary for the placement of roads and driveways? Yes No

5. Have the number and lengths of roads been minimized? Yes No

6. Have the width of roads and driveways been reduced to 25 feet and 15 feet respectively? Yes No

If no, explain

7. Will the forest canopy be maintained over roads and driveways? Yes No

8. Will the forest canopy be maintained up to the edge of roads and driveways? Yes No

9. Will at least 80% of the forest interior be maintained after development? Yes No

If no, indicate percentage of forest interior that will be maintained? _____%

10. Are there special conditions on the site that limit where houses and other development activities may be located such as wetlands, steep slopes, etc.? If so, please identify and explain.

WETLANDS, FLOOD PLAIN - SEE SITE PLAN

11. Do you believe that the *Site Design Guidelines* have been followed and that FIDS habitat has been conserved on this site? Yes No

MITIGATION REQUIREMENTS

If the *Site Design Guidelines* have been followed the required mitigation will be the creation of FIDS habitat equal to the acreage being directly cut or disturbed. (See pages 27 - 28 for specific mitigation options and criteria.)

Enter acreage of FIDS habitat that is being directly impacted 0.06⁺ acres.

THIS IS YOUR MITIGATION REQUIREMENT WHEN THE SITE DESIGN GUIDELINES ARE FOLLOWED.

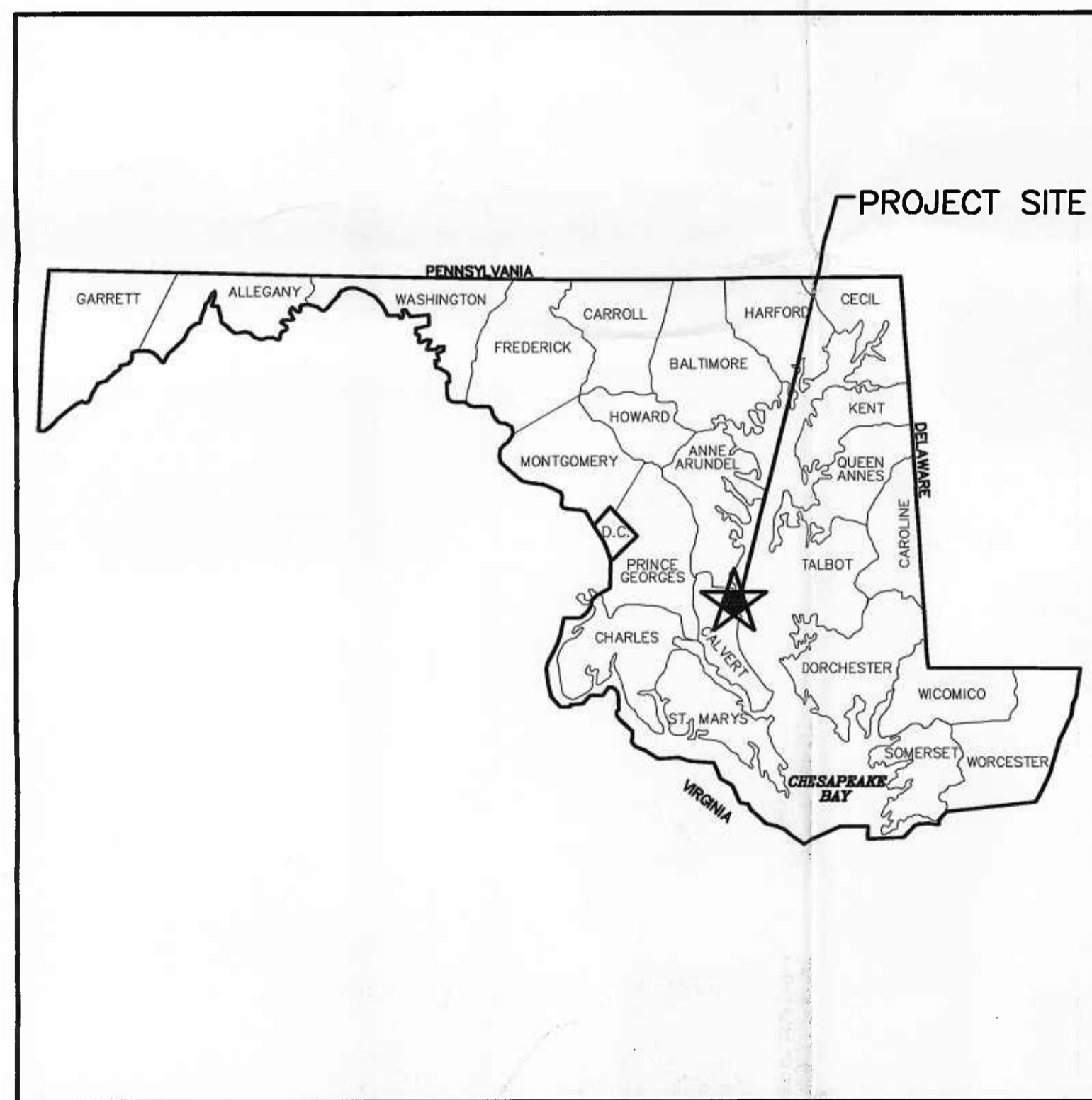
If the *Site Design Guidelines* have not been followed complete the following.

- A. Pre-development FIDS habitat _____ acres.
- B. Post development FIDS habitat _____ acres.
- C. Pre-development FIDS habitat interior _____ acres.
- D. Post development FIDS habitat interior _____ acres.
- E. FIDS habitat being directly impacted _____ acres.
(Subtract B from A)
- F. Interior lost due to development _____ acres.
(Subtract D from C)
- G. Multiply F. times two (2) _____ acres and add to E. = _____ acres.

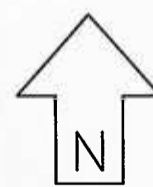
} NOT APPLICABLE

THIS IS YOUR MITIGATION REQUIREMENT WHEN THE DEVELOPMENT GUIDELINES HAVE NOT BEEN MET.

TOWN OF CHESAPEAKE BEACH WASTEWATER TREATMENT PLANT SHELLFISH PROTECTION TANK AND INTERIM EXPANSION

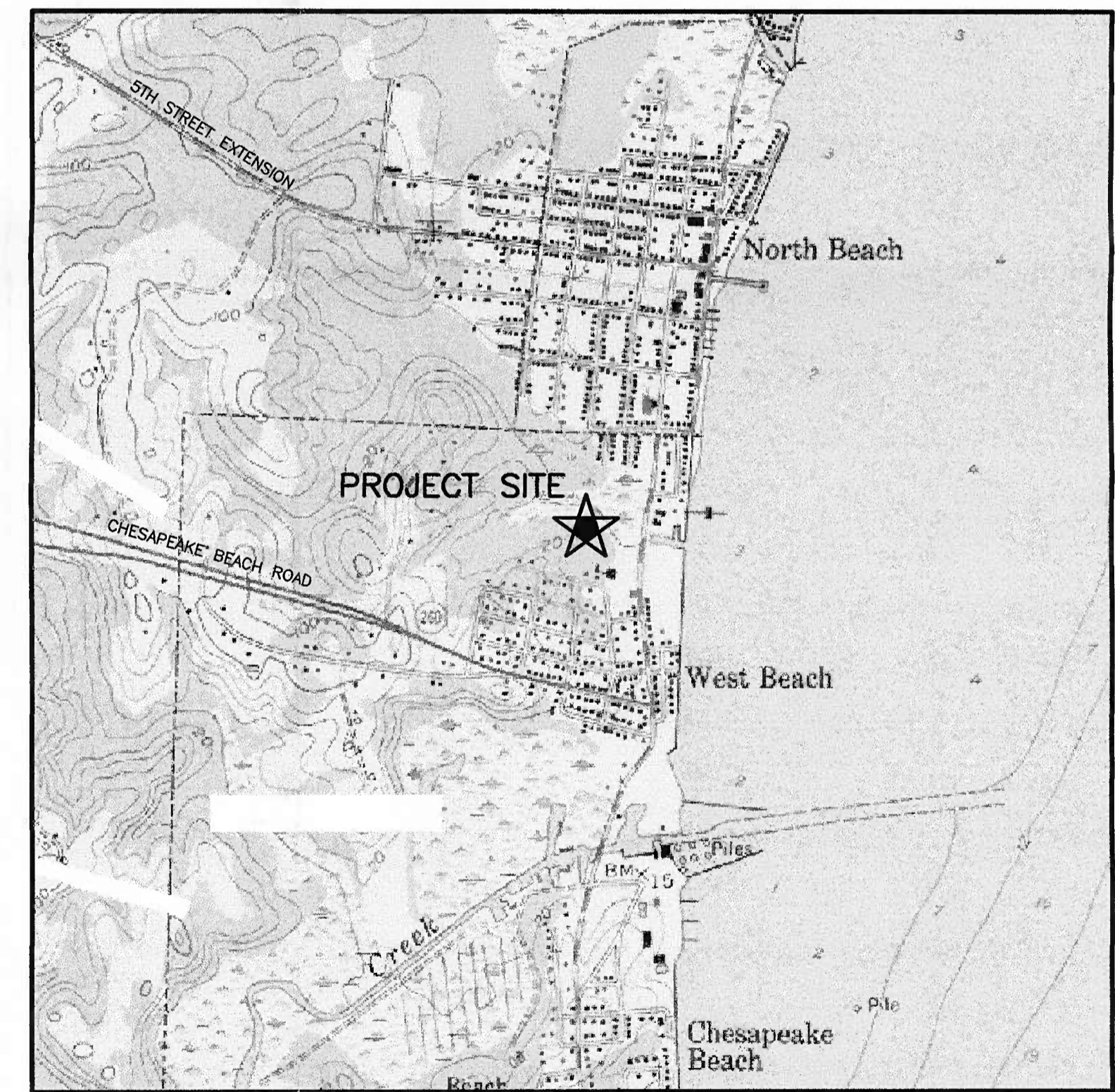


VICINITY MAP
NTS



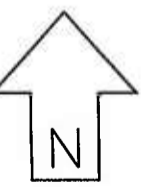
MAYOR, TOWN OF CHESAPEAKE BEACH
GERALD W. DONOVAN

TOWN ADMINISTRATOR
MICHELLE JENKINS



LOCATION MAP
NTS

RECEIVED
NOV 06 2006
CRITICAL AREA COMMISSION



TOWN OF CHESAPEAKE BEACH, MARYLAND 2006



Stearns & Wheler, LLC
Environmental Engineers and Scientists

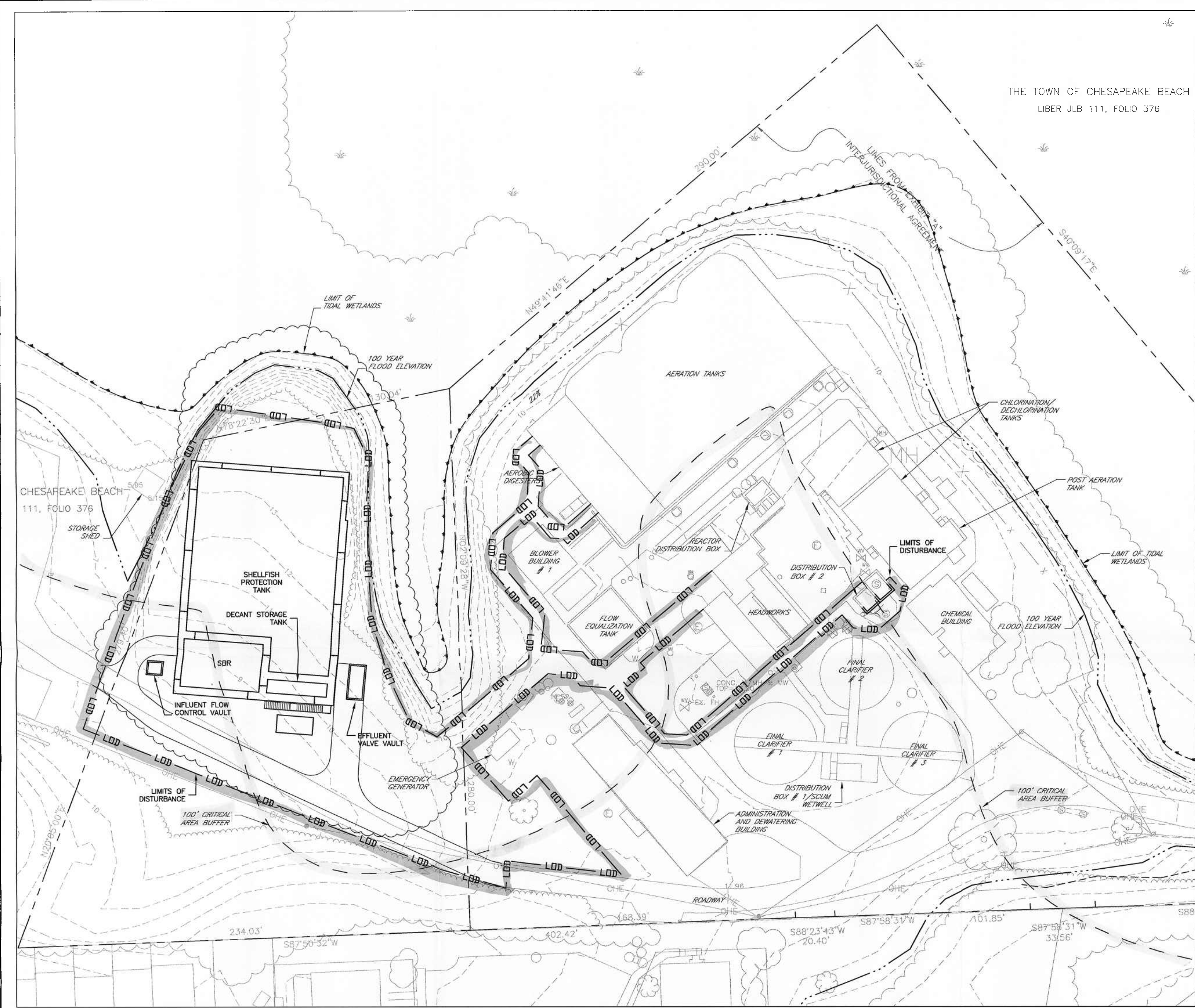
BOWIE NEW TOWN CENTER
4201 NORTHVIEW DRIVE, SUITE 404
BOWIE, MD 20716
TEL. (301)805-5629
FAX. (301)805-4665

TOWN OF CHESAPEAKE BEACH PLANNING AND ZONING

These plans have been reviewed in connection with the Town's Zoning process and are to be used by the County for processing applicable building permit(s).

APPROVED

GERALD W. DONOVAN, MAYOR, TOWN OF CHESAPEAKE BEACH



THE TOWN OF CHESAPEAKE BEACH
LIBER JLB 111, FOLIO 376

GENERAL NOTES (APPLY TO ALL DRAWINGS)

- A. EXISTING FACILITIES AND PIPING SHOWN LIGHT. NEW FACILITIES AND PIPING SHOWN DARK.
- B. EXISTING CONDITIONS SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON A 2005 TOPOGRAPHIC SURVEY PERFORMED BY MRA, INC. AND OBTAINED FROM AVAILABLE CONTRACT AND RECORD DRAWINGS. THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY.
- C. 100-YEAR FLOOD ELEVATION IN THIS AREA IS APPROXIMATELY 11.5- FEET ABOVE MEAN SEA LEVEL (14- FEET WITH WAVE ACTION).
- D. SOIL BORINGS MADE AUGUST 2006 BY [REDACTED] AND USED AS BASIS FOR AUGUST 2006 GEOTECHNICAL ENGINEERING REPORT.
- E. ALUMINUM IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH BITUMINOUS COATING IN ACCORDANCE WITH SPECIFICATION SECTION 09900.
- F. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL EXISTING PIPING ELEVATIONS, LOCATIONS, SIZE AND TYPE OF MATERIAL WITH NEW PIPING PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL EXISTING EQUIPMENT, BUILDING, ROOM, AND TANK DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING NEW EQUIPMENT. REPORT DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- G. FOR PIPE HANGERS AND SUPPORTS, SEE SPECIFICATION SECTION 15140.
- H. MOWING STRIPS NOT SHOWN FOR CLARITY. CONTRACTOR SHALL PROVIDE MOWING STRIPS AROUND ALL NEW STRUCTURES AND PIPING IN ACCORDANCE WITH THE DETAIL SHOWN ON DRAWING C-12.
- I. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS NECESSARY TO VERIFY LOCATIONS OF EXISTING UNDERGROUND PIPING AND UTILITIES PRIOR TO CONSTRUCTING NEW FACILITIES.
- J. CONTRACTOR SHALL SUPPLY HANDRAIL AS SHOWN ON STRUCTURAL AND MECHANICAL DRAWINGS.
- K. WHERE OPENINGS ARE LEFT IN STRUCTURE WALLS FROM DEMOLITION OF EQUIPMENT, CONTRACTOR SHALL SEAL WITH MATERIALS THAT MATCH THE EXISTING CONSTRUCTION. TOOTH ALL MASONRY CONSTRUCTION TO EXISTING.
- L. WHEN NEW ELECTRICAL CONDUIT IS SHOWN ON PROFILES, IT IS FOR INFORMATION ONLY. REFER TO ELECTRICAL DRAWINGS FOR LOCATION, SIZE AND NUMBER. NOT ALL NEW CONDUIT IS SHOWN ON THE PROFILES.
- M. CONTRACTOR SHALL REPLACE ALL PAVEMENT THAT IS 1) SHOWN AS REPAIR/REPLACE ON THE CONTRACT DRAWINGS, 2) IMPACTED BY NEW CONSTRUCTION, AND 3) IMPACTED BY CONTRACTOR'S OPERATIONS.
- N. ANY FENCING DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPLACED OR SUPPLEMENTED BY TEMPORARY FENCING TO MAINTAIN A SECURE SITE THROUGHOUT CONSTRUCTION.
- O. FOR ALL COVERED CONCRETE TANKS AND CHANNELS CONTAINING FLUIDS, COAT CONCRETE WALLS FROM TOP OF COVER TO TWO (2) FEET BELOW LOW WATER LEVEL IN ACCORDANCE WITH SPECIFICATION SECTION 0900.

LEGEND (APPLIES TO ALL "C" DWGS)

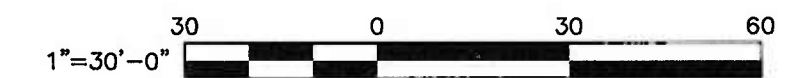
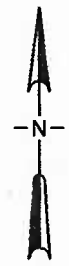
— LOD — LOD —	LIMITS OF DISTURBANCE	○ YH	YARD HYDRANT
-X-X-	FENCE	○ MH	MANHOLE (MHES - ELECTRICAL)
- - - -	EXISTING CONTOUR LINE	○ LP	MANHOLE (MHSS - SANITARY SEWER)
- - - -	NEW CONTOUR LINE	○ LP	MANHOLE (MHWS - STORM WATER)
-SD-	EXISTING STORM DRAIN	○ LP	MANHOLE (MHCH - CHEMICAL)
-SD-	PROPOSED STORM DRAIN	○ LP	UTILITY POLE
-E-E-	EXISTING UNDERGROUND ELECTRIC	○ LP	TREE
-OHE-OHE-	EXISTING OVERHEAD ELECTRIC	○ LP	
~~~~~	TIDAL WETLAND BOUNDARY	○ SB-101	SOIL BORING
~~~~~	WOODS	○ FH	FIRE HYDRANT
~~~~~	EDGE OF WOODED AREA	○ CB	CATCH BASIN
~~~~~	PROPERTY LINE	○ PDCB	PLANT DRAIN CATCH BASIN
~~~~~	100 YR FLOOD ELEVATION	○ SC	SURVEY CONTROL POINT
~~~~~	CRITICAL AREA BOUNDARY	○ GM	GROUND WATER MONITORING WELL
~~~~~	100' CRITICAL AREA BUFFER	○ BM	BENCH MARK
~~~~~	SOILS BOUNDARY	○ CO	CLEANOUT
□	EXISTING STRUCTURE, PAVEMENT OR SIDEWALK	○ VB	VALVE BOX
□	NEW STRUCTURE	○ SIP	STANDARD INLET PROTECTION
□	FUTURE STRUCTURE	○ P	PIPE BOLLARD
□	REPAIR/REPLACE PAVEMENT	○ SW	SWAMP
□	DEMOLITION		
□	NEW CONCRETE PAVEMENT		
□	NEW PAVEMENT		
□	REPAIR/REPLACE SIDEWALK		
□	NEW CONCRETE SIDEWALK		
□	SEAL PAVEMENT		
□	GRAVEL		

BUILDING STRUCTURE			
POINT NO.	DESCRIPTION	NORTHING (Y)	EASTING (X)
1			
2			

NOTES:

- 1. LOCATION OF NORTHING AND EASTING ON NON-CIRCULAR STRUCTURES ARE BASED ON OUTSIDE FACE OF WALLS.
- 2. LOCATION OF NORTHING AND EASTING ON CIRCULAR STRUCTURES ARE BASED ON CENTER OF STRUCTURE.
- 3. A BOUNDARY SURVEY WAS NOT PERFORMED FOR THIS PROJECT. BOUNDARY LINE WAS GENERATED FROM LATEST AVAILABLE PLAT(S) OF RECORD AND SHOULD BE CONSIDERED APPROXIMATE.

SITE PLAN
SCALE: 1"=30'-0"



03.11.2006 STEPHEN NEWMAN
J:\40000\40082 CHESAPEAKE BEACH HEADWORKS & OUTFALL IMPROVEMENTS\3\DRAWINGS\CIVIL\40082_32C01.DWG

NOTES:
Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.

FOR APPROVAL						
1	LB	DATE	CAL	DATE		
ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
PROJECT SUPERVISOR			DEPARTMENT SUPERVISOR			
ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE

50% SUBMITTAL -
FOR REVIEW ONLY



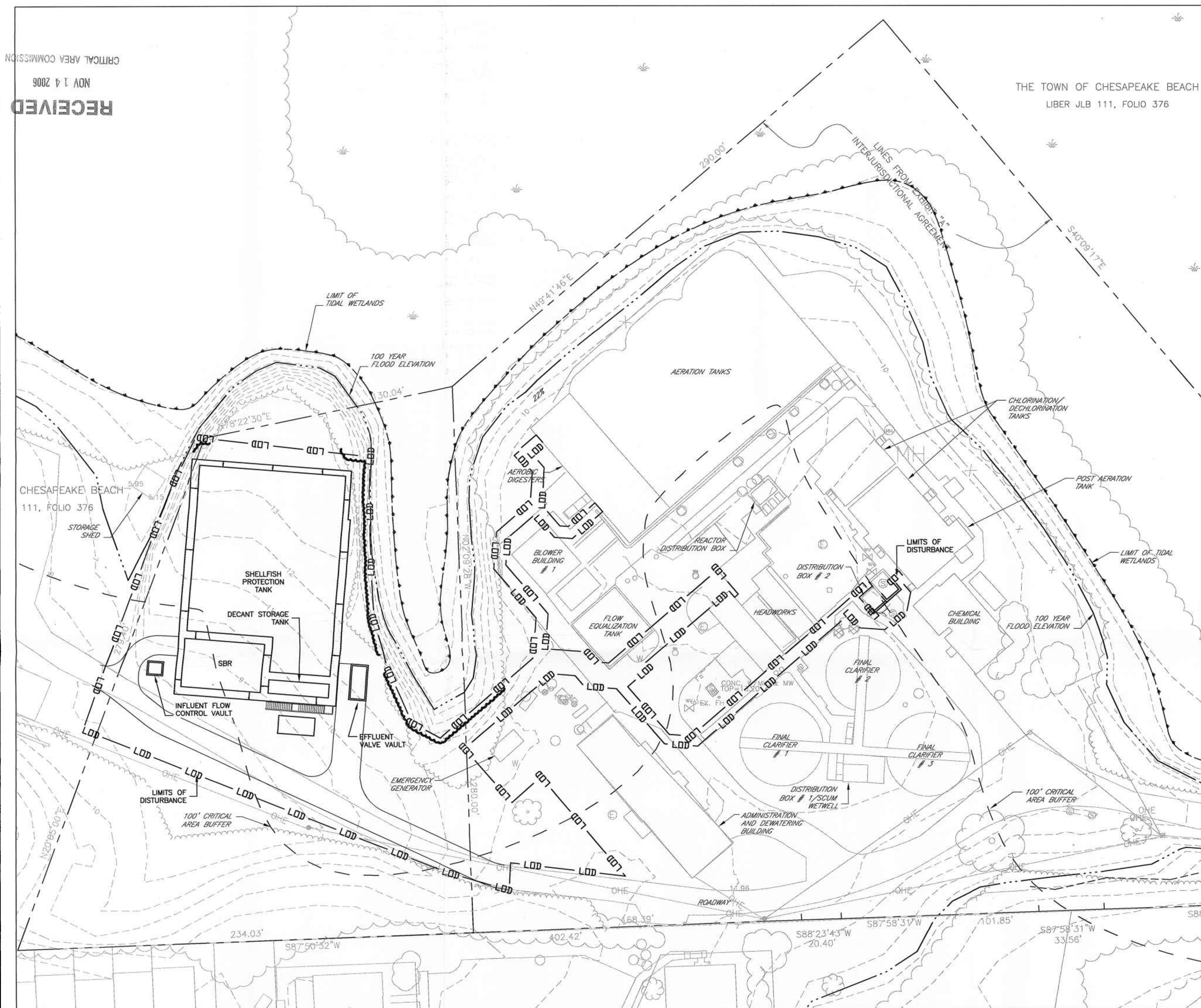
Stearns & Wheler, LLC
Environmental Engineers and Scientists

BOWIE, MARYLAND

CHESAPEAKE BEACH, MARYLAND			
SHELLFISH PROTECTION TANK AND INTERIM EXPANSION			
PROPOSED OVERALL SITE PLAN			
JOB NO.	40082	CONTRACT	SHEET C-1

RECEIVED
NOV 14 2006

THE TOWN OF CHESAPEAKE BEACH
LIBER JLB 111, FOLIO 376



GENERAL NOTES (APPLY TO ALL DRAWINGS)

- A. EXISTING FACILITIES AND PIPING SHOWN LIGHT. NEW FACILITIES AND PIPING SHOWN DARK.
- B. EXISTING CONDITIONS SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON A 2005 TOPOGRAPHIC SURVEY PERFORMED BY MRA, INC. AND OBTAINED FROM AVAILABLE CONTRACT AND RECORD DRAWINGS. THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY.
- C. 100-YEAR FLOOD ELEVATION IN THIS AREA IS APPROXIMATELY 11.5- FEET ABOVE MEAN SEA LEVEL (14- FEET WITH WAVE ACTION).
- D. SOIL BORINGS MADE AUGUST 2006 BY [REDACTED] AND USED AS BASIS FOR AUGUST 2006 GEOTECHNICAL ENGINEERING REPORT.
- E. ALUMINUM IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH BITUMINOUS COATING IN ACCORDANCE WITH SPECIFICATION SECTION 09900.
- F. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL EXISTING PIPING ELEVATIONS, LOCATIONS, SIZE AND TYPE OF MATERIAL WITH NEW PIPING PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL EXISTING EQUIPMENT, BUILDING, ROOM, AND TANK DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING NEW EQUIPMENT. REPORT DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- G. FOR PIPE HANGERS AND SUPPORTS, SEE SPECIFICATION SECTION 15140.
- H. MOWING STRIPS NOT SHOWN FOR CLARITY. CONTRACTOR SHALL PROVIDE MOWING STRIPS AROUND ALL NEW STRUCTURES AND PIPING IN ACCORDANCE WITH THE DETAIL SHOWN ON DRAWING C-12.
- I. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS NECESSARY TO VERIFY LOCATIONS OF EXISTING UNDERGROUND PIPING AND UTILITIES PRIOR TO CONSTRUCTING NEW FACILITIES.
- J. CONTRACTOR SHALL SUPPLY HANDRAIL AS SHOWN ON STRUCTURAL AND MECHANICAL DRAWINGS.
- K. WHERE OPENINGS ARE LEFT IN STRUCTURE WALLS FROM DEMOLITION OF EQUIPMENT, CONTRACTOR SHALL SEAL WITH MATERIALS THAT MATCH THE EXISTING CONSTRUCTION. TOOTH ALL MASONRY CONSTRUCTION TO EXISTING.
- L. WHEN NEW ELECTRICAL CONDUIT IS SHOWN ON PROFILES, IT IS FOR INFORMATION ONLY. REFER TO ELECTRICAL DRAWINGS FOR LOCATION, SIZE AND NUMBER. NOT ALL NEW CONDUIT IS SHOWN ON THE PROFILES.
- M. CONTRACTOR SHALL REPLACE ALL PAVEMENT THAT IS 1) SHOWN AS REPAIR/REPLACE ON THE CONTRACT DRAWINGS, 2) IMPACTED BY NEW CONSTRUCTION, AND 3) IMPACTED BY CONTRACTOR'S OPERATIONS.
- N. ANY FENCING DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPLACED OR SUPPLEMENTED BY TEMPORARY FENCING TO MAINTAIN A SECURE SITE THROUGHOUT CONSTRUCTION.
- O. FOR ALL COVERED CONCRETE TANKS AND CHANNELS CONTAINING FLUIDS, COAT CONCRETE WALLS FROM TOP OF COVER TO TWO (2) FEET BELOW LOW WATER LEVEL IN ACCORDANCE WITH SPECIFICATION SECTION 09000.

LEGEND (APPLIES TO ALL "c" DWGS)

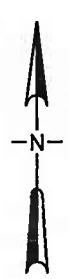
— LOD — LOD —	LIMITS OF DISTURBANCE	○ YH	YARD HYDRANT
-X-X-	FENCE	○ MH	MANHOLE (MHSL - ELECTRICAL)
-30-	EXISTING CONTOUR LINE	○ MHSS	MANHOLE (MHSS - SANITARY SEWER)
-30-	NEW CONTOUR LINE	○ MHSW	MANHOLE (MHSW - STORM WATER)
-SD-	EXISTING STORM DRAIN	○ MHCH	MANHOLE (MHCH - CHEMICAL)
-SD-	PROPOSED STORM DRAIN	○ UP	UTILITY POLE
E-E	EXISTING UNDERGROUND ELECTRIC	○ T	TREE
OHE-OHE	EXISTING OVERHEAD ELECTRIC	○ SB-101	SOIL BORING
~	TIDAL WETLAND BOUNDARY	○ FH	FIRE HYDRANT
~	EDGE OF EXISTING WOODED AREA	○ CB	CATCH BASIN
~	EDGE OF CLEARING - NEW EDGE OF WOODS	○ PDCB	PLANT DRAIN CATCH BASIN
---	PROPERTY LINE	○ SC	SURVEY CONTROL POINT
---	100 YR FLOOD ELEVATION	○ GM	GROUND WATER MONITORING WELL
---	CRITICAL AREA BOUNDARY	○ BM	BENCH MARK
---	100' CRITICAL AREA BUFFER	○ CO	CLEANOUT
---	SOILS BOUNDARY	○ VB	VALVE BOX
□	EXISTING STRUCTURE, PAVEMENT OR SIDEWALK	□ SIP	STANDARD INLET PROTECTION
□	NEW STRUCTURE	○ P	PIPE BOLLARD
□	FUTURE STRUCTURE	○ S	SWAMP
□	REPAIR/REPLACE PAVEMENT		
□	DEMOLITION		
□	NEW CONCRETE PAVEMENT		
□	NEW PAVEMENT		
□	REPAIR/REPLACE SIDEWALK		
□	NEW CONCRETE SIDEWALK		
□	SEAL PAVEMENT		
□	GRAVEL		

BUILDING STRUCTURE			
POINT NO.	DESCRIPTION	NORTHING (Y)	EASTING (X)
1			
2			

NOTES:

- 1. LOCATION OF NORTHING AND EASTING ON NON-CIRCULAR STRUCTURES ARE BASED ON OUTSIDE FACE OF WALLS.
- 2. LOCATION OF NORTHING AND EASTING ON CIRCULAR STRUCTURES ARE BASED ON CENTER OF STRUCTURE.
- 3. A BOUNDARY SURVEY WAS NOT PERFORMED FOR THIS PROJECT. BOUNDARY LINE WAS GENERATED FROM LATEST AVAILABLE PLAT(S) OF RECORD AND SHOULD BE CONSIDERED APPROXIMATE.

SITE PLAN
SCALE: 1"=30'-0"



1"=30'-0" RECEIVED

13:11:2006 STEPHEN NORMAN
J:\40000\40082 CHESAPEAKE BEACH HEADWORKS & OUTFALL IMPROVEMENTS\32\DRAWINGS\CIVIL\40082.32C01.DWG

NOTES:
Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.

FOR APPROVAL						
1	LB	DATE	CAL	DATE		
ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
PROJECT SUPERVISOR			DEPARTMENT SUPERVISOR			
ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE

50% SUBMITTAL -
FOR REVIEW ONLY



Stearns & Wheler, LLC
Environmental Engineers and Scientists

BOWIE, MARYLAND

CHESAPEAKE BEACH, MARYLAND
SHELLFISH PROTECTION TANK AND INTERIM EXPANSION
PROPOSED OVERALL SITE PLAN

JOB NO.	40082	CONTRACT	SHEET	C-1
---------	-------	----------	-------	-----

J:\40000\40082 Chesapeake Beach Headworks & Outfall Improvements\32\Drawings\Civil\40082.32C01.dwg, 11/13/2006 5:12:05 PM, Bw_Design\jln\40082.32C01.dwg