

Response to Public Hearing Docket #2022-P-W-0003; Fort DuPont Redevelopment and Preservation Corporation Subaqueous Lands Permit Application

To Whom it May Concern:

Bottom-line:

The Slope Stabilization application for a Subaqueous Lands Permit needs to be returned to the applicant. This application requires a comprehensive, collaborative application that reflects the national stature of the waterway, its historical nature, the completed archeological report, the approved Sediment and Erosion Control Plan, confirmation that Public Hearing Notices were mailed to adjacent and interested property owners IAW Title 7 and engineering drawings and specifications commensurate with the stated benefits of the application. The application is not credible. It is a simplistic, inelegant piecemeal approach to a situation that requires a mature, comprehensive and collaborative plan that is feasible, suitable and acceptable to all stakeholders.

Background:

FDRPC submitted two previous Subaqueous Lands Permit Applications since 2017. One of the applications was to install two outfalls along the Delaware City Branch Channel to the C&D Canal. That permit was approved and later extended without comment. Even though the permit was extended, the work was not completed within the specified time frame.

The other two Subaqueous Lands Permit Applications are for a slope stabilization project along the Delaware City Branch Channel to the C&D Canal. The first application was to perform a 2000' rip-rap slope stabilization project. After public comments and a January 2021 public hearing the application was denied. The current slope stabilization permit is to rebuild a 1600' rip-rap revetment.

The two previous permit applications were rife with missing, inaccurate, omitted and misleading information. Most notable misleading information is the insistence that since 2017 the Fort DuPont owns the Delaware City Branch Channel. That of course is not true now or in 2017. The previous application also did not list the adjacent property owners who should be notified of a public hearing should the DNREC Secretary require a Public Hearing.

Summary of Continuing Issues:

Issues with the present application are:

1. The plan destroys historical artifacts of the nearly 200-year old, only remaining portions of the original C&D Canal. The plan has no sensitivity to the national stature and significance neither of the channel nor of their intent to destroy the remaining artifacts.
2. There is no public Sediment and Erosion Control Plan submitted. That plan, although reported to have been approved in Dec 2021 needs to be submitted with the Subaqueous Lands Permit application as a comprehensive and complete part of this application. Without a joint submission the current application represents a piecemeal approach to environmental protection. This is made more critical as the applicant is a known violator of environmental laws with a 1 Many 2021 Notice of Environmental Violations.
3. The plan is devoid of aesthetics. The plan removes all vegetation opposite the free and public Delaware City Promenade and makes no plans to recreate anything other than the industrial appearance of a barren rip-rap spillway-like with a hardscape background of townhomes devoid of trees.
4. The plan was developed in isolation with no community input or involvement other than the public comment and hearings. The applicant failed to provide any Public Hearing notices as required by law to the adjacent and interested parties. The applicant operates in a silo without any outside or community input.
5. There is no plan to replace the destroyed tree canopy. The tree canopy is an important element of what provides Delaware City recognition as a Tree Town USA.
6. The application lacks administrative accuracy.
7. The technical design has unanswered questions and potential flaws. As the plan sits now it does not leave disaster to chance. It plans for it.

FDRPC & DNREC Mutual Association

DNREC is the single shareholder in FDRPC. As the single share holder, there may be the appearance or desire by the FDRPC leadership to see its relationship with DNREC as one where the Corporation is protected. The corporation might feel that the errors, omissions, fabrications, misleading information or fraud that it commits might be adjudicated by DNREC. The corporation could submit and resubmit applications without consequence to DNREC.

However, since DNREC is the senior regulator and guardian of the state's environmental laws, the Department must maintain an above average sensitivity to the public trust and transparency when dealing with FDRPC. In fact, DNREC must hold FDRPC to the highest standards to maintain the public trust. In that regard, DNREC served the public well by enforcing the standards that required this second slope stabilization application to be submitted.

Revised Application and Applicant Public Hearing Comments

Most of the errors and omissions of this application were addressed in a letter delivered to DNREC just prior to the January 12th hearing deadline and a revised application posted to the Public Hearing site. It is important to note that there was a 60 day window during which the applicant could have addressed the public comments however the applicant failed to do so until the eleventh hour limiting the public's access to these changes.

Public Hearing

The revised application does not contain the names of all the adjacent homeowners who required notification of the Jan 2022 Public Hearing. The application missed many adjacent landowners as of the date of the original submission. As a revised application, the names of the new home owners who purchased property since the original application was prepared are not added.

A preliminary review of affected homeowners indicates that the adjacent homeowners were not notified of the Public Hearing in violation of Title 7, Para 7208 (b) reprinted below. Since there were no Proof of Mailings or Registered Mail Receipts included in the Public Hearing Presentation by the applicant, at a minimum, DNREC must see such proof of mailings.

§ 7208. Hearing.

(a) A public hearing shall be held:

- (1) If a grant or lease for a period of time in excess of 20 years is sought; or
- (2) If the Secretary determines that a public hearing is in the public interest; or

(b) Notice of the public hearing shall be sent to the applicant, to immediately adjacent property owners and to any interested person who requests it, and such notice shall be published in the same manner as the application.

Preservation Actions

Based on the applicant's eleventh hour letter, the applicant's 2022 Public Hearing Presentation and the public hearing transcript, it would seem that a number of actions were done to protect the historic artifacts and nature on one of the nation's oldest canals. The applicant's eleventh hour letter, as well as the Public Hearing Presentation, states a number of activities were being done in conjunction with the Delaware Division of Historic and Cultural Affairs in order to preserve and protect the historic nature of the canal.

I contacted the Delaware Division of Historic and Cultural Affairs to substantiate the claims. I was directed to the person who “is aware of all the Section 106 Reviews.” After a two-day investigation by a knowledgeable HCA staff member, no evidence was found to substantiate the HCA connection. And, since the first two Subaqueous Lands Permit Applications were riddled with misinformation and false information, I had no basis to doubt that the items in the applicant’s eleventh hour letter were misleading at best and an out-right lie at worse. I leave that investigation to DNREC and the State Attorney General.

Rebuilding vs New Construction

The applicant’s eleventh hour letter, revised application and the 2022 Public Hearing Presentation provided a wordsmithed application. The revised documents create the impression that the slope stabilization project is new construction. However, Line 16 A of the basic application and Line 4 of Appendix I indicate the project is repair. Line 16 A confirms there are existing structures that pre-date 1969. Line 4 of the Appendix I states that the existing structures were man-made. Although the applicant believes his application and Appendix are in agreement and that the slope stabilization will be new construction, there remains internal disagreement in the application.

Moreover, according to the Title 7, Chapter 72 definitions for this application do not have a term for “repair” or “replacement”. Rather one term is used: “Reconstruction”; the definition of which is below:

(d) “Reconstruction” means the rebuilding of a channel, bridge, culvert, stormwater basin or water control structure that requires significant renovation or repair of their major structural features. This rebuilding shall be characterized by a replacement or major restorative effort similar to the degree required in the original design and construction of the channel, bridge, culvert, stormwater basin or water control structure. This rebuilding shall not change the purpose, scope or capacity of the channel, bridge, culvert, stormwater basin or water control structure.

-Title 7, Chapter 72. Para 7202. Definitions

The definition of “reconstruction” used in Title 7, Chapter 72 makes it clear that this slope stabilization is rebuilding (reconstruction) and not new construction. The slope stabilization project will be a restorative effort similar to the degree required of the original pre-1969 design and construction. As new construction, the application requires additional documentation.

Aesthetics

The topic of aesthetics is broad, interpretive and requires a community determination of “aesthetics”. And as with most of the plans of Fort DuPont Redevelopment and Preservation Corporation community involvement is discouraged.

Included in the applicant's presentation during the 2022 Public Hearing Presentation was a Slide 15 which discusses aesthetics. The slide attempts to show the similar aesthetics between a 2010 slope stabilization project done on the west bank of the Delaware City Branch Channel and the proposed project. However, the only similarities are the facts that both are slope stabilization projects and both designed by Duffield.

Figure 1. Applicant's 2022 Public Hearing Presentation, Slide #15



Shown in the Applicant's Public Hearing Slide #15 are photos of the western bank of the Delaware City Branch Channel looking north. The slide was used to show the aesthetics of a completed Delaware City Marina slope stabilization project completed in 2010. The point of the photos is to show what the Fort DuPont project might look like after 3 years. However, the comparison is not of like things and therefore, not valid. It misses the entire point of aesthetics from both sides of the Delaware City Branch Channel. Plus, the photo on the right is not 3 years after the completion. That photo was taken since the new lights were placed on the 5th Street Bridge in 2021.

Pictured on the left side of Figure 1, (Applicant's Slide 15 from the 2022 Public Hearing) there is one building present. That building is substantially set back from the rip rap revetment. The building has trees around it to break the skyline. The building is a fraction of the length of the rows of townhomes above the top of the slope on the east bank. The building on the west, right bank is not square to the channel but at an oblique which provides viewers some contrast, texture and relief from the rows of townhomes on the east bank. The Delaware City Marina slope stabilization project features a wide grass strip more than twice the width of the grass strip proposed by the applicant's engineer drawings.

The photo on the right side of Figure 1 shows the longer view of the Delaware City Marina slope stabilization project. The caption above the photo is “Three Years post Construction”. The right side photo shows a boarder view of the completed slope stabilization project of the Delaware City Marina. One can view the magnificent, stately tree line visible along Canal Street, the clear lack of monolithic, the near monochromatic colors of long pods of townhomes a few feet from the top of the proposed rip-rap edge; where no trees to provide color, shade, definition, warmth or break the skyline. Only a row-on-row of buildings the length of the slope stabilization project. This will be the new view of those walking the west bank’s public promenade looking at the proposed reip-rap revetment. There sill be no canopy of lush green providing shade or adding to the peace and quiet.

Figure 1, (Slide 15 from the Applicant’s 2022 Public Hearing Presentation) presents another piece of misleading information. The photo is reprinted below on the right. In the Applicant’s Slide it shows the completed Delaware City Marina slope stabilization project. The with the caption “Three Years Post Construction.” This makes gives the observer the idea that the right photo on Slide 15 of the 2022 Public Hearing Presentation was taken three years after the slope stabilization project was completed. However, that photo was taken within the past year, 11 years after the construction.

Figure 2. Applicant’s Slide 7 from the 2022 Public Hearing (left) Half of Slide 15 (Right)



Figure 2 contrasts and compares two photos submitted by the applicant during the 2022 Public Hearing presentation. Figure 2 shows the applicant’s slide 7 on the left and Slide 15 on the right.

The two photos are the same. However, the photo on the right is labeled as “Three years post construction”. However, the new street lights were installed in 2021 on the 5th Street Bridge. The new lights are circled in pink. So the photo is not from 2013 as suggested in the applicant’s slide #15 but is from late 2021 or early 2022. It does not represent the Delaware City Marina slope stabilization project after three years but after 11 years.

The fact that the applicant perhaps mislabeled the slide might be considered minor except for the fact that the error shows the continued sloppiness, lack of attention to detail or more nefarious: the willingness to use misleading information to deceive and defraud in order to make a point. Both the applicant and the agent stated that the information presented at the public hearing was accurate. But the information presented during the 2022 Public Hearing was neither true nor accurate.

It might be construed that applicant's Slide 15 is the continuation of the same ongoing misinformation campaign operated by the applicant. To grant approval to this application, is to reward a process and an applicant that acts more like a three-ring circus than a state sponsored, tax-payer funded public instrumentality. Oversights and misleading information taints the goals of the original legislation that created the Fort DuPont Redevelopment and Preservation Corporation, it brings a bad name to government and provides zero credibility to anything the organization presents.

Benefits in Question

Applicant's Slide 24 from the 2022 Public Hearing states the benefits of the slope stabilization project. The last benefit listed on the slide is:

*Protect the infrastructure along the top of the slope.
Includes public access Promenade, houses and site/infrastructure*

This slope stabilization project is designed to stop erosion. The reference on Slide 24, quoted above, is the only mention of protecting the infrastructure on the top of the slope. To protect infrastructure at the top of the slope becomes a more complex structural equation which requires additional due-diligence on the part of all stakeholders.

Protecting the bank of the Delaware City Branch Channel presents more challenges than the simple prevention of erosion. It requires documenting and understating the various new stresses that have been placed on the top of the slope as a result of the construction. The redevelopment of the Fort DuPont project placed millions of tons of additional weight were added to the side of a failing slope. This additional weight exerts tremendous downward and outward dynamic forces. Additionally, the failing slope is subject to the ravages of constant scouring by the currents that flow through the Branch Channel, to hydrostatic pressures created by the ebb and flow of the tide and to the newly introduced vibrations of heavy traffic.

The developer added tremendous pressures to the slope through the millions of tons of fill dirt used to raise the homes out of the flood plain, constructed a dense community of homes, built roads, curbs and sidewalks. All of these components add considerable weight and exert forces on the canal bank.

The bio-retention ponds add stress to the bank. Empty bio-retention ponds are benign. However once filled with sediment laced waters there will be tremendous new, added stresses and weight. With the bio-retention ponds, those stresses may appear suddenly with a flooding event. It is this scenario that will create the greatest chance for slope

failure. All these forces are new that the slope has never previously faced. These forces will occur at the same time when rains swell the Branch Channel and as the channel's current intensifies it will exponentially increase scouring. Scouring has the ability to undercut the anchor toe. This scenario moves to an exaggerated high tide level akin those seen during Hurricane SANDY.

Moreover this issue of infrastructure protection along the top of the bank should have been addressed before the Fort DuPont Redevelopment and Preservation Corporation further de-stabilized the already unstable bank by removing scores of large, upright trees. These trees' roots have been the only stabilizing influence on the bank for decades. These large trees were cut in November 2020.

The lack of any empirical data to show the weights and stress loads at the very edge of the planned revetment's top is crucial to current discussions regarding emergency vehicle traffic during the round-about construction. Designed in a silo, without the benefit of public discourse, Fort DuPont Redevelopment and Preservation Corporation will build a round-about on Route 9 at the entrance to the development.

Part of the plan is to use the pathway previously designated as a promenade to permit ingress and egress of emergency equipment to include fire trucks. The added stresses that these heavy moving vehicles will add to a fragile slope which has been described by the applicant as a "failed slope" is suspect. The promenade's use as an emergency route is immediate. It is to be done without the benefit of the revetment. And it will be done without the added stabilizing influence of the trees prematurely removed. Again, the leader of Fort DuPont planned disaster. A more ominous set of circumstances could not be conjured in the best sci-fi novels.

As evidence of the tree removal, please review the Applicant's Slide 10 from the 2022 Public Hearing Presentation. Figure 3 below reprints that slide and circles in pink one of many trees removed from the bank. Notice how the remaining base of the tree is straight relative to the bank. This straightness is in sharp contrast to the remaining smaller trees which are not straight. It is also to realize that the cut trees were of much larger size.

Figure 3, Slide 10, Applicant's 2022 Public Hearing



If this slope stabilization project is to secure the infrastructure at the top of the slope as briefed during the 2022 Public Hearing Presentation, then the Fort DuPont Redevelopment and Preservation Corporation has not left disaster to chance. It has planned it. These issues needed to be addressed before the redevelopment of the site. But that ship has sailed.

It would have been very, very wise not to indiscriminately cut down larger, straighter, more valuable trees that add to the slopes stability if the Corporation wanted to ensure the slope's stability for the new, infrastructure at the top of the slope. This becomes more problematic when the current discussion of an emergency roadway is added directly at the edge of the unstable slope.

Design Technical Flaws

Previous remarks made in 2020 regarding the Public Comment Period and in 2021 regarding the Public Hearing questioned the design of the proposed rip-rap revetment. In the new application an anchor toe was included as part of the design.

However, there was no inclusion of a method to hold the Geotextile material in place. Previous comments mentioned the use of a trench by which the Geotextile might be able to be anchored. Below are two illustrations.

Figure 4. Previous Design

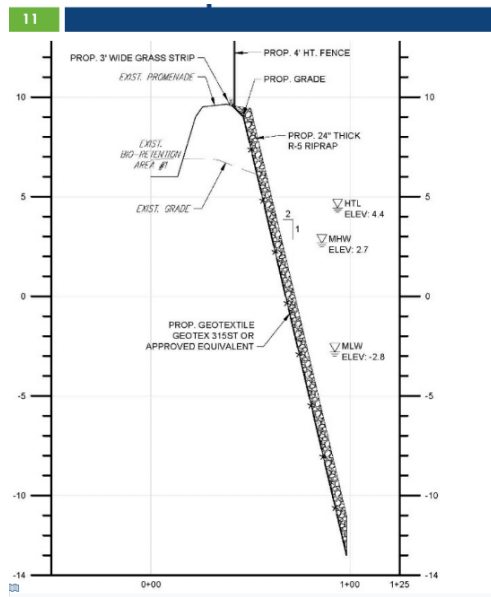
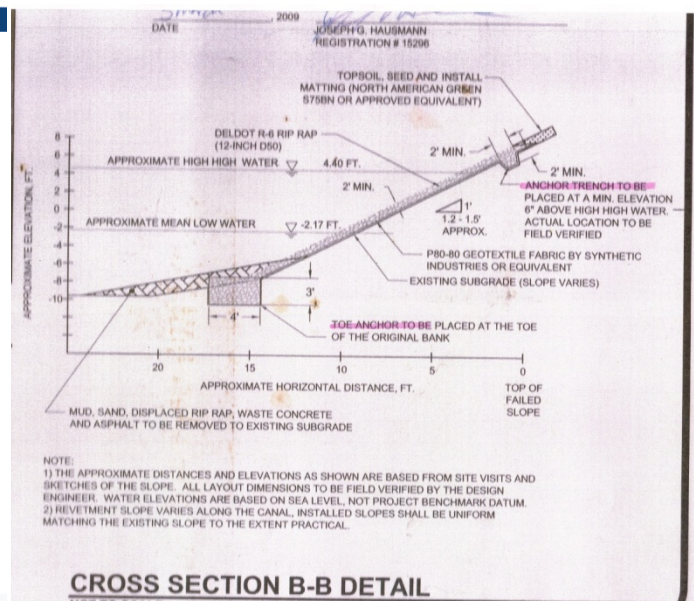


Figure 5. Delaware City Marina Design



On the left is the applicant's previous design shown as Slide 11 of the January 2021 Public Hearing Presentation. This design does not have the anchor toe along the base of the revetment. The applicant's plan was updated to reflect an anchor toe. However, there are still design flaws.

Figure 5 depicts the Duffield design used to create the revetment at Delaware City Marina. Photos of that completed design are shown in Figure 1. Figure 5 above shows a keyway along the top of the revetment dug into the slope. This keyway is in Figure 5 and appears on the right hand edge of the drawing and labeled "ANCHOR TRENCH TO BE....". This keyway design holds the filter cloth in place. This helps hold the filter cloth in place and helps the rip-rap maintain its shape.

Even the more robust design shown in Figure 5 has resulted in slope failure after installation. This is a critical element. If one of the design benefits is to protect the heavier, more trafficked infrastructure that is closer to the edge of the bank than that infrastructure on the west, then there must be a new, more robust design.

Design Benchmarks

The design drawings indicate where the rip-rap revetment will begin and a distance to the anchor toe. But those drawings do not provide an empirical lat/long or survey control for the location of those benchmarks.

Sediment & Erosion Control Plan

In the eleventh hour letter, the applicant references a December 2021 Sediment and Erosion Control Plan which was done separately from the slope stabilization plan which has not been made part of this Subaqueous Lands Permit Application. Without inclusion of the fresh Sediment and Erosion Control Plan the public lacks a mechanism for comment.

Mathematics

The applicant has not addressed the discrepancy used to determine total cubic yards of rip-rap to be used with the method prescribed in Appendix I, Page 3, "Calculations" and previous public comments. The applicant has responded to why the formula required by DNREC is inferior to their formula.

Summary

For all the evidence provided in this and other comments from the 2022 Public Hearing I request that the Subaqueous Lands Permit Application be denied in its entirety without the ability to submit additional revisions.

Moreover, the applicant's presentation transcript mention mentions the Delaware City side of the channel and the Fort DuPont side of the channel. These references indicate the insidious nature of the Fort DuPont leadership to create a wedge between Delaware City and the development. It is indicative of the lack of community involvement and silo mentality used at the Fort DuPont Redevelopment and Preservation Corporation.