

From: marsh.mike@epamail.epa.gov
To: [Chet Myers](#)
Cc: [Christopher Morris](#); [Eric Las](#); [Jay Borkland](#); [Joshua Ray](#); [Stacy Minihane](#); [Williams.Ann@epamail.epa.gov](#); [Leclair.Jackie@epamail.epa.gov](#); [Catri.Cynthia@epamail.epa.gov](#); [colarusso.phil@epamail.epa.gov](#); [Minkin, Paul NAE](#); [Sneeringer, Paul J NAE](#)
Subject: RE: final plans
Date: Friday, October 26, 2012 5:01:31 PM
Attachments: [Image.image003.png@01CDB2DB.9E470990.png](#)
[Image.image004.png@01CDB2DB.9E470990.png](#)

Chet - Here are EPA's comments on the design of the River's End Park mitigation project. Paul Minkin and Paul Sneeringer of the Corps have reviewed and concur on these comments. Plan sheets reviewed were presented in Appendix 2 on the Final Mitigation Plan CD (dated October 22, 2012).

1. The species proposed at the Rivers End park appear to be in inappropriate tidal regimes. *Spartina patens*, and *Distichlis spicata* are both listed as low marsh species, and proposed for planting below MHW. I would consider them high marsh species (I recognize that *Spartina patens* sometimes occurs in low marsh settings, but I think of it as primarily growing around MHW and higher). In the proposed design, they intend to plant both species below MHW (at 2.5 feet or lower, where MHW is at 2.61). They also propose to plant *Juncus gerardii* and *Iva frutescens* from 2.5' to 4.0' - exactly where each species is proposed to be planted is not shown, but I would assume higher in this zone. For example, I would assume that, despite the elevation range indicated, they would not propose planting *Iva frutescens* below MHW. The plans are not explicit on locations of planting zones for various species (see item 2).
2. More detail must be provided on the exact locations and elevations/tidal regimes proposed for the various species, including vegetative community zones for various species, which should be shown on the plans.
3. Cross sectional drawings should include the identification of vegetative community zones (e.g., high marsh, low marsh). Elevation ranges within the high marsh zone for particular species should be indicated as appropriate (e.g., *Iva frutescens* should be located within the upper high marsh).
4. Overall, the design is akin to a bowl with a relatively flat bottom, bounded by steep berms. I would imagine that the proposed design would at best (dependent upon tidal flushing, see Item 5) result in mostly low marsh, *Spartina alterniflora*, with thin bands of high marsh species at the sharp elevation change along the berms. I would recommend flattening the slope of the western berm, such that there would be a gentle slope from slightly above the HTL elevation down to a MHW elevation, ~1/3 of the way across the "bowl." A steeper outer slope transitioning from just above HTL to upland elevations could still be used.
5. The purpose and design of the berm along the southern and eastern boundary needs to be better explained. It appears that this berm is being constructed at an elevation above the existing surface elevation (~5.0') and is ~5 feet wide along the top of the berm and ~15 feet in total width. It seems possible that this berm could act as a dam, restricting tidal flow out of the southern portion of the proposed mitigation area. Its purpose is unclear. If it is meant to protect the existing salt marsh, it seems that this could be accomplished by simply including a buffer zone between the appropriately graded mitigation area (high marsh if necessary) and the existing salt marsh, with appropriate erosion and sedimentation controls, etc. It appears that constructing the berm itself could have as much or more adverse impact on the existing salt marsh than simply grading. If it is necessary to tie contours into higher elevations along the existing salt marsh boundary, it appears that could be accomplished by tying into the recommended gentle slope from the western berm. One possible concept would be to have a broader area of high marsh in the southern portion of the site, very gently graded toward the northern low marsh portion.
6. Grading contours in the design should exhibit sinuosity and microtopography. The design should limit the use of straight line contours, and try to emulate a natural wetland system. The goal here is a salt marsh creation area, not a detention basin.

7. Target elevations should be based on reference elevations from the existing salt marsh at the site, rather than arbitrarily picking an elevation (e.g., for much of the proposed project, it appears that a target elevation of ~2.0 or higher was chosen - this may be too high for successful low marsh establishment). The applicant should determine the elevation ranges of the existing high and low marsh at the site, and use these ranges as references for wetland creation.

8. Plans should specify the removal of rip rap at the northern end of the site, and indicate salt marsh restoration/creation in that area.

9. What is the purpose of the existing foundation at the northern end of the site? Are there future plans to construct something on that foundation, and if so, what? Could future use at this foundation have an adverse impact on mitigation project?

Please let me know if you have any questions.

Thanks,

Mike

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-----Chet Myers <cmyers@apexcos.com> wrote: -----
To: Stacy Minihane <sminihane@btiweb.com>, Christopher Morris <CMorris@apexcos.com>
From: Chet Myers <cmyers@apexcos.com>
Date: 10/25/2012 06:07PM
Cc: Joshua Ray <JRay@apexcos.com>, Eric Las <elas@btiweb.com>, Mike Marsh/R1/USEPA/US@EPA,
Jay Borkland <jborkland@apexcos.com>
Subject: RE: final plans

Stacy,

It is my understanding from discussions with Mike that EPA will be asking for some re-grading (a shallow re-grade up to shallower elevations), more distinctions between high and low marsh plants, the removal of the "berm" that shows up on the cross-section, and a few other items.

We don't want you to start work until the official notice comes from EPA, because they are awaiting additional comments. The letter from EPA should be more explicit, in any case.

When you review, we can discuss timing further.

Thanks,

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Chet Myers

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From: Stacy Minihane [<mailto:sminihane@btiweb.com>]
Sent: Thursday, October 25, 2012 6:05 PM
To: Chet Myers; Christopher Morris
Cc: Joshua Ray; Eric Las; marsh.mike@epamail.epa.gov; Jay Borkland
Subject: RE: final plans

Thank you for the heads up, Chet. Please let us know as soon as possible what your deadline will be so that we can schedule accordingly.

Stacy H. Minihane, PWS

Associate

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From: Chet Myers [<mailto:cmyers@apexcos.com>]
Sent: Thursday, October 25, 2012 6:00 PM
To: Stacy Minihane; Christopher Morris
Cc: Joshua Ray; Eric Las; marsh.mike@epamail.epa.gov; Jay Borkland
Subject: RE: final plans

Hi Stacy,

We heard today from Mike Marsh from EPA. They are going to have a list of comments and corrections that they would like associated with the mitigation design.

We expect the comments sometime tomorrow (from Mike Marsh at EPA, who we copied on this e-mail).

Chris and I will be out, but we will try to get the comments over to you. We will likely need you to revise the design rather quickly.

Thanks,

<<http://www.apexcos.com/>>

Chet Myers

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From: Stacy Minihane [<mailto:sminihane@btiweb.com>]

Sent: Monday, October 22, 2012 1:54 PM
To: Christopher Morris
Cc: Chet Myers; Joshua Ray; Eric Las
Subject: final plans

Chris- attached please find the final design plans for the Salt Marsh Creation project at Rivers End Park in New Bedford, MA.

The anticipated Salt Marsh creation area based upon this design is 0.88 acres. We have conservatively used elevation 2.5' as the upper limit of proposed Salt Marsh for mitigation credit. The 0.88 acres excludes existing Salt Marsh that will be temporarily impacted to accommodate the Salt Marsh Creation.

We will forward you the CAD file contours you requested earlier today in a separate email.

Please do not hesitate to contact me if you have any questions. If I am not available at the office my cell number is 774.454.4759.

Thank you,

Stacy H. Minihane, PWS

Associate

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