



# CITY OF SALEM CONSERVATION COMMISSION

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## **\*REVISED NOTICE OF MEETING**

Notice is hereby given that a meeting of the Salem Conservation Commission will be held on October 18, 2022, at 6:30 p.m. via remote participation in accordance with a Chapter 107 of the Act of 2022.

*Gregory St. Louis, PE, Chair*

## **DRAFT MEETING MINUTES**

**Bart Hoskins opens the meeting at 6:34 pm.**

### **I. ROLL CALL**

*Present:* Dan Ricciarelli, Bart Hoskins, Tyler Glode, Tom Campbell (4)

*Absent:* Greg St. Louis, Judith Kohn (2)

*Commission Staff:* Kate Kennedy (1)

*Minute Clerk:* Chelsea Titchenell (1)

*Late Arrival:* Tom Philbin (1)

### **II. REGULAR AGENDA**

- A. 1 and 2 Lee Fort Terrace – DEP# 64-756 – (Continued)** - Public Hearing- Notice of Intent of BC Lee Fort Terrace LLC, 2 Center Plaza, Boston MA. The purpose of this hearing is to discuss the proposed replacement of 50 apartments with 124 apartments, associated garage, surface parking, outdoor community space and new public open space at the property located at 1 and 2 Lee Fort Terrace, Map 41, Lots 242 and 249, Salem MA. The proposed work is located within an area subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

*A motion to continue the public hearing to November 15<sup>th</sup>, 2022 is made by Dan Ricciarelli, seconded by Tom Campbell, and passes 4-0.*

- B. 67 Derby Street – DEP# 64-761- (Continued)** – Public Hearing - Notice of Intent of Crowley Wind Services on behalf of Fort Point Associates, 31 State Street, Boston, for geotechnical borings and test pits for the Salem Wind Port Project, 67 Derby Street, located in Land Subject to Coastal Storm Flowage subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Richard Jabba, of Fort Point Associates, speaks. Highlights include:

- Last meeting went over proposed borings and was asked to submit three plans, which have since been submitted:
  - Survey plan showing flood zone based on existing conditions
  - Wetlands plan showing proposed site investigations
  - Site plan that reflected the current existing flood zone and proposed work in the future
- Proposed borings are needed in order to design the site
- Will come up with more defined site plan based on findings from the borings

Bart Hoskins: As I recall from the last meeting, we had some questions about how the site had been left by the previous owners and it sounds like the recent submission addresses those questions?

- Richard Jabba: Yes, I believe we did by showing you the sight and flood zone are mostly along the shoreline and that the borings are within that area. There are additional borings upland of it, but they are outside of the 100-year flood zone, based on the existing survey.

Bart Hoskins: I know that Greg had some thoughts.

- Kate Kennedy: Yes, pretty much the entire site is in the flood zone and depending on the site work that was done with the prior project and ownership, there might be confusions about what was done and what is left to address. I think the Conservation Commission and City have been trying to work on being really mindful of flood zone areas and so there were questions previously if the project team would be seeking a letter on non-provision. But despite that Greg did have input that it would make sense to have the borings and test bits done so we can address things appropriately, but it wouldn't confirm the precise resource areas
- Bart Hoskins: So, we could issue an order for the borings and proposed work with the condition that this does not affirm the resources shown which will be reviewed, subject to final development. The gist is we leave open the exact resource areas for later development with the interest of getting that moving
- Richard Jabba: That would help this move along and that would be the key goal here. We submitted this to understand the site better so the design can continue and prepare a more detailed notice of intent to go through a more detailed review with you later.

Kate Kennedy: I would like the record to show that Tom Philbin has joined the meeting. Tom were you present for the presentation?

- Tom Philbin: Yes, and I am in support of it.

*A motion to close the public hearing is made by Dan Ricciarelli, seconded by Tyler Glode, and passes 5-*

0.

A motion for an Order of Conditions for the preliminary investigation site, subject to standard conditions and the special condition that this does not affirm the resource maps currently shown, which would be subject to be shown in more detailed review in subsequent development is made by Dan Ricciarelli, seconded by Tom Philbin, and passes 5-0.

- C. 252 Bridge Street – DEP# 64-### - Public Hearing - Notice of Intent of Ramie Schneider, WinnDevelopment Companies, LLC. for construction of a mixed-use redevelopment on a .97-acre site, associated commercial space, landscaping, and parking, located at 252 Bridge Street, within an area subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.**

Raime Schneider, of WinnDevelopment Companies LLC, shares a presentation. Highlights include:

- Here for Phase 1 on the Crescent Lot
- Winn was awarded an RFP by the SRA in 2019 for the Crescent Lot and historic courthouse buildings
- SRA and MBTA are the current owners
- .97-acre site
- Proposed development is a 120-unit, mixed income, 5 story building
- Commercial space, residential parking, and residential units

Eric Olsen, Wetland Scientist for VHB, continues the presentation. Highlights include:

- It is adjacent to the North River and is tidally influenced
- Exists of two parcels of land with asphalt parking and perimeter grass area
- Located within North River watershed
- Not in priority habitats of rare species or wildlife
- Not in any designated Zone 2 areas
- Entirely in 100-year floodplain
- Wetland is bank, coastal bank, land under waterbodies/waterways and river front area
- Erosion sediment controls installed according to project plan before work begins
- No impacts to the bank, coastal bank, land under waterbodies or waterways or the 25 foot no disturb zone of 50-foot mitigation zone
- Impacts will be done to land subject to coastal storm flowage
  - Temporary impact of 32,367 sq ft
  - Permanent impact – 3,544 sq ft
- and the riverfront area
  - Temporary impact – 18,978 sq ft
  - Permanent impact – 2,963 sq ft
  - Mostly degraded by impervious parking lot already
  - Overall reduction of impervious area by 82 sf within the surface area
- Erosion and sediment control program with temporary stabilization, seeding, dust control, sediment control, barriers, and catch basin inlet protection

- Planting plan and RFA improvements
- Project work complies with the applicable performance standards
- Project does have a climate change adaptation and mitigation narrative
- Resiliency presentation being done at the Planning Board on Thursday, October 20<sup>th</sup>

Dan Ricciarelli: Is there anything at grade? Just parking?

- Raime Schneider: There is a huge elevation change on this site, so by the MBTA drive that is all on the river level. Then we go up from Bridge Street and there is a residential lobby, public space, we are contemplating a little retail space, a fitness scenter, and then resident support. On the river level, it is 100% parking, trash collection, bike storage, and an elevator. It is an open-air garage. There will be an arm to monitor usage.
- Bart Hoskins: Do you know the elevation of the surface of the parking area?
- Eric Olsen: It is at 6 feet and gradually goes up to 9 feet.
- Tyler Glode: Can you reference the FEMA elevation?
- Dan Ricciarelli: 10
- Tyler Glode: So, the whole garage floor slopes from 6 to 9, but that is all impeded, but the livable floor is still above ten?
- Dan Ricciarelli: Yes. And will it be a concrete surface for the paving for parking?
- Raime Schneider: Yes
- Dan Ricciarelli: And drainage?
- Stephanie Kruel, from VHB: The lobby level is at 19 and the first level of residential units are at elevation 30.

Bart Hoskins: And can you speak to the parking level elevations and how that would be handled in the event of a flood?

- Stephanie Kruel: Sure, the building is subject to the flood related section of the building code and engineered garages can be dry flood proofed or wet flood proofed. If they are wet flood proofed, they must have at least one opening that is at or below the base flood elevation. If they are dry flood proof, they must be one foot above. In this case the base flood elevation is ten and the design is eleven. It is not possible to get the cars into the garage at elevation 11, so it has to be wet flood proofed. The opening must remain below 10 to allow water to come in and then go out with the tide at the chance of a 1% flood event. This will start by being handled operationally, and the residents who would be parking there would need to move their cars. In the future we are working together with the City to address resilience in the long term, which will require some offshore measures that will protect all of the surrounding areas, not just this site. In the first tier it is to protect it through wet flood proofing and then look at other mitigation strategies in the future.
- Tyler Glode: So as part of the mitigative features, you aren't proposing to fill any of this within the floodplain currently and then later provide compensatory flood storage, this is purely as is with the current elevation and build up from there
- Stephanie Kruel: There is no requirement for compensatory flood storage, as you would be compensating for the sea. There will be some fill in relation to the grading of the space, but it won't be over the base flood elevation of 10.

Dan Ricciarelli: Can someone explain the drainage to me for this site?

- Eric Olsen: There is an existing pipe draining system and porous pavers on the site where a portion of the site will go through porous pavers through a treatment system and the remainder of the site would go into the current outfall pipes. There will be no increase in offsite flow from the project.

Tom Philbin: Was there any plan to keep more stormwater onsite, for instance have it flow through the ground through swales before it reaches the North River?

- Eric Olsen: Yes, the landscaped area, porous pavers, and underground treatment system filled with stone is the best attempt to treat is before it goes off site

Tom Philbin: The tree count seems low. Is there a possibility of being able to plant more or provide more by the riverbank or any other mitigating factors that could be off site. I know you wouldn't be required to but any thoughts on that?

- Chris McFarlan, Landscape Architect of Landworks Studio: At this time, we have only looked at what is onsite, and we are taking a fairly small area at the river level and trying to make an urban park for the residents and public. What we are trying to produce is an area that is going to be a mix of both vegetation and hardscape so there is enough space for people to use the area. We can talk to ownership for other possibilities, but we can look at adding a few more.
- Raime Schneider: We are adding trees on Bridge Street and shrubs and grasses as well.

Tom Philbin: And what were the requirements for Chapter 91?

- Stephanie Krueel: So, we have not yet submitted our Chapter 91 application, but it does comply with all the requirements. The height set back and provision for public accommodation. The purpose of this project we are considering the first habitable floor and then the outdoor areas need to be public areas as well, which is how it has all been designed.

Dan Ricciarelli: And I am assuming that all plaza and roof deck drainage will be into the same subsurface system?

- Eric Olsen: Yes, that is correct

Dan Ricciarelli: Is there a plan for a lay down area for the construction materials?

- Raime Schneider: That is in process. It will mostly have to happen on site because we are in the right of way and MBTA owned land.
- Dan Ricciarelli: Is that part of your temporary disturbance number?
- Eric Olsen: Yes, so the temporary impacts are for impervious surface that will temporarily be disturbed and changed. And then permanent impact is for impervious to pervious.

Tom Campbell: Did you discuss new utilities you might be installing for this project? Electric, gas? I just didn't see a proposed utility plan.

- Raime Schneider: Our Civil Engineer couldn't join at the last minute, so let us follow up as I don't want to misspeak

Tom Campbell: Are you removing any soil or just grading the property? And if you are removing, will you be doing proper disposal requirements?

- Eric Olsen: It is my understanding that we are not removing soil, but if we were to, we would go through the proper channels?

Bart Hoskins: Has there been discussion of where snow would be put in the event of a storm?

- Chris McFarlan: One of the reasons that planting is using a lot of native grasses is so that most planters can be used for snow storage on the terrace level, Bridge Street, and the lower level.

Tyler Glode: You said you guys had a closed drainage system and you are maintaining existing outfalls, or utilizing them?

- Eric Olsen: Yes, it is my understanding that there is an existing pipe that we would tap into and there is an underground treatment that is basically a treatment chamber filled with stone that will attempt to infiltrate the water as much as possible. It is in the NOI exactly which area connect into that, I believe the roof drains would go into that system.
- Tyler Glode: Are you proposing check valves and such to make sure it doesn't back fill?
- Eric Olsen: I believe that all already exists, so we wouldn't be updating that.
- Raime Schneider: Let us follow up on that with the Civil Engineer
- Tyler Glode: Yeah, if you can follow up. We would like to see that check valves are in and that the system can drain out but not backfill and if you are proposing infiltration measures, how is that infiltration measure going to be utilized.
- Raime Schneider: I do know we are proposing infiltration level. I can't say the level or how much, but we can follow up.

Kate Kennedy: Have you already done CCTVing or know for sure that you can connect to the existing drainage?

- Eric Olsen: It is my understanding that we can, yes.

Bart Hoskins: I am not sure how far we want to take this process this evening, I am standing in for the chair and I don't know if he has plans on submitting additional questions. Were you planning to have an Order of Conditions this evening, or can we keep this open?

- Tyler Glode: Based on the open number of questions, I don't feel comfortable closing.
- Raime Schneider: We can focus on the items that were brought up today and we are happy to come back.

Dan Ricciarelli: Would we want to do a site visit?

- Kate Kennedy: I would defer to the Commission. I would love to have a site visit with you collectively, if possible, but I defer to how you would like to go forward.
- Bart Hoskins: I think it would be a good idea to do the visit before the next meeting.
- Eric Olsen: I can organize that through Kate.

Dan Ricciarelli: Where are you guys with the approval process?

- Raime Schneider: We are going back to the Planning Department on Thursday night but had started in September. But we have been in front of the SRA and working on the final design review with the DRB. We are pursuing low-income housing tax credits for the site. The Housing Department does consider having permits in hand to be important so that we are shovel ready.

*A motion to continue the public hearing to November 15<sup>th</sup>, 2022 is made by Dan Ricciarelli, seconded by Tyler Glode, and passes 5-0.*

**D. Children's Island – DEP# 64-768** - Public Hearing – Notice of Intent of Scott Patrowicz, Land Development Engineering, on behalf of the North Shore YMCA, for the construction of two bathroom facilities, renovations to existing structures, and associated stormwater site work located at Children's Island, Salem, within an area subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Scott Patrowicz, on behalf of the applicant, shares a presentation. Highlights include:

- We have the island broken into North, Mid, and South sections
- Most of the kids come off the pier structure where this is a gangway and float.
- Historically, have landed the barge on Tractor Beach and would repeat that
- Bathroom facility by the pool and handwashing area by the main lodge on the North side. We would like to upgrade both of those to a composting bathroom facility
- A raised structure off the ground so units can be at grade level
- Other area is on the south side amongst invasive plants that currently still need to be identified
- Also looking to repair structures without changing the footprint structures
- Bathrooms located in these areas due to 2014 FEMA flood line and located them both out of the 100-year flood line
- Would like to mitigate storm water through 24" deep crushed stone
- Ramp would go up to get to the level of the facility with stone underneath it
- Most buildings will be renovated, but there will be a couple that will have proposed new structures that are not included in these applications and will come before you at a later date.
- Paramount to get operational bathrooms that are discharging to the locations we would like
- Part of the assignment is to close out existing facility and install the new facility to be an improvement to the environment
- Ideally would like them to be up before the next season of camp
- May also have a helicopter, which will be placed in the field on the island
- Master plan will be presented next month

Dan Ricciarelli: Can you explain the composting toilet facility?

- Scott Patrowicz: It is a chamber that's below the floor, so the kids never see the chamber, and it basically sits inside the chamber, and it creates a compost and then the compost melts down upon itself and there is some effluent that will be held in a holding tank and then it is serviced once a season. It is used a lot in state parks, such as Cranes Beach. We will sign a contract for servicing with whoever provides us with toilets to make sure they are properly serviced and then transport them out there.

- Dan Ricciarelli: How is water handled?
- Scott Patrowicz: On top of the hill there is the salt water pumped from the pier and then from there it is all gravity pulling it down throughout.

Tom Philbin: Do they have to pump the liquid from the compost annually?

- Scott Patrowicz: So that will be pulled by gravity into a holding tank and then the holding tank will be pumped out at the end of the season when we are closing up the buildings.
- Tom Philbin: And the current system is septic?
- Scott Patrowicz: Yes, we are not yet sure of the final location, so we do have to do some exploration. Wherever it is we need to stop it from going there. So, once we figure that out, we will crush the bottom and back fill it with sand. We do know the one on the south side, but it is not in the best area. It is a good time to get rid of that.
- Tom Philbin: Did they get pumped regularly?
- Scott Patrowicz: No. This has been long overdue.

Bart Hoskins: My understanding of compost toilets is that there are some ongoing maintenance, like woodchip material being thrown in. It is lowkey but there is some operational maintenance that needs to be added from time to time.

- Scott Patrowicz: Yes, and that will be under contract.

Tom Philbin: Can we possibly provide educational signage for the kids?

- Scott Patrowicz: That is a great idea, and it would be interesting to let the kids know about this.

Tom Campbell: Do you have any dewatering that might be necessary?

- Scott Patrowicz: No, we are going to dig two feet to get as much crushed stone as possible. On the south side the ledge isn't the problem. And if we have to shift this 5 feet or so to get more crushed stone, then we can do that as well. We will need to excavate for storm water management though.

*A motion to close the public hearing is made by Dan Ricciarelli, seconded by Tom Campbell, and passes 5-0.*

*A motion to issue an Order of Conditions, subject to standard conditions, is made by Dan Ricciarelli, seconded by Tom Philbin, and passes 5-0.*

Dan Ricciarelli: Are there any open orders out there?

- Scott Patrowicz: Yeah, there are two, one for the wall and one for the pool.

- E. 71 Columbus Avenue – DEP# 64-767** - Public Hearing - Notice of Intent of John Spinale, 71 Columbus Avenue, for construction of a garage addition in Land Subject to Coastal Storm Flowage, subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.



Bill Manuell of Wetlands and Lands Management, on behalf of the applicant, shares a presentation. Highlights include:

- Add 13' by 36' addition to the back of the garage
- Brick pavestone driveway coming off Columbus Avenue with entry to garage on the west side
- Juniper Cove on the opposite side of the beach during low tide that goes up to the seawall
- On the street side the seawall goes up 2 ½ to 3 feet
- Resource area is a beach resource area
- The proposed work is encumbered by land subject to coastal storm flowage with elevation at 11 but are outside of the buffer zone to the beach and outside of the no disturb and mitigation zone
- Will be single story garage with deck on top
- The rear wall of the existing wall will be removed to make it all open.
- Will be installing a flood vent to the back of the structure as part of the coastal resiliency plan and will have no impact on abutting properties
- Construction access will be down the driveway to the back
- Mini excavator for small amount of digging to put footings in
- Anything not used to backfill will be taken offsite
- About 150' to the seawall
- Gently sloping in the area, but sediment migration shouldn't be a concern as a fence helps enclose the property to further reduce concern about sedimentation

Bart Hoskins: So, the addition to the garage, is that concrete floor?

- Bill Manuell: Yes

Public Comment:

William Griset, address not stated: I am an abutter. For transparency, I am also the Chairman of the Planning Board, though I am only here as an abutter tonight. I am not a direct abutter, there is one home between us. This is a single-story addition but there is no roof or structure other than railing on the roof deck?

- Bill Manuell: That is correct.
- William Griset: And can you briefly describe the flood vent action and how that works for any concern an abutter might have?
- Bill Manuell: It is a mechanical feature installed into the framing of the home. When there is pressure from the outside of the vent from advancing floodwaters, it activates and opens up and allows the water to flow inside and through the structure
- William Griset: I have no objection to my neighbor building the garage. Thank you and good luck with the project.

Dan Ricciarelli: I think those flood vents, the bottom must be 12 inches above grade. So, you may want to look at that.

- Bill Manuell: Yes, we have that clearance on the back.

A motion to close the public hearing is made by Dan Ricciarelli, seconded by Tom Philbin, and passes 5-0.

A motion to issue an Order of Conditions, subject to standard conditions, is made by Dan Ricciarelli, seconded by Tyler Glode, and passes 5-0.

- F. 50, 52 Circle Hill Road – DEP# 64-764, DEP# 64-765** – Public Hearing – Two Notices of Intent of Patrick Delulis, Pasquanna Developers, Inc. for construction of two proposed single-family homes, associated driveways, utilities, grading and landscaping located at 50 and 52 Circle Hill Road, subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Kate Kennedy: They have requested to continue to the next hearing. This is the one where we are waiting for further clarification on a few items.

A motion to continue the public hearing to November 15<sup>th</sup>, 2022 is made by Tom Philbin, seconded by Dan Ricciarelli, and passes 5-0.

- G. 20 Pierce Avenue-** for Determination of Applicability for Stephen Herzog, VHB, on behalf of Boston Gas Company, 40 Sylvan Road, Waltham MA for proposed borings and test pits at 20 Pierce Avenue, located within an subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Stephen Herzog of VHB, representing Boston Gas Company, shares a presentation. Highlights include:

- Exploratory borings and test pits
- The facility has historic structure remanence and potential subsurface obstructions whose locations need to be determined to design
- Project for new boil off gas compressor to improve efficiency of storage
- Need to investigate what is underneath the subsurface
- Total of 32 exploratory points, 11 in the flood zone
- No other resource areas impacted
- Soil will be excavated by vacuum extraction and stored in a container and then returned to be reused as backfill so grade will not be changed, and impact will be temporary
- Prepared to used compost filter socks if rain is in the forecast.
- Each extraction is an hour or so and all work will be done in 1 week
- Approval is needed due to the areas in the flood zone

Bart Hoskins: And it was a coal gasification site before.

- Stephen Herzog: Yes, until 1960, so it is also subject to an activity used limitation
- Bart Hoskins: Is there a contingency if a test pit reveals something you weren't expecting to find?
- Stephen Herzog: Yes, that is part of why the soil would be returned, since there is a cap. If it can't be returned it will be stored and then dealt with in accordance with the activity and use

limitation.

Tom Philbin: I have a bit of a concern since it is an AUL and I believe you are piercing the cap in order to do that. What are your concerns with that?

- Stephen Herzog: Yes, in places where the cap must be pierced, it will be repaired or cut and sealed to return it to its original condition.
- Tom Philbin: And an LSB is on site?
- Stephen Herzog: Yes

Tom Philbin: And you are requesting a determination of applicability. Is there a reason you didn't come in for a NOI?

- Stephen Herzog: Only because it is straight forward and knowing that we will be coming in with an NOI once the boiler has been designed. That will be when we would come in with the NOI since that will be an actual structure that may impact the flood zone.

Dan Ricciarelli: We had another client coming in with a full NOI doing the same work, but I understand the reason for the RDA. Going forward is this a foundation building or on skids?

- Stephen Herzog: I honestly don't know; I am thinking it will be on footings.
- Dan Ricciarelli: It is a big area to be testing.
- Stephen Herzog: Yes, because they need to make connections and so forth. But I am not the designer, so I honestly don't know the foundation.

Dan Ricciarelli: As far as the repair on the membrane of the cap, how does that happen? Do you have to over excavate to do that?

- Stephen Herzog: That isn't my area of expertise, and I am guessing, but I do remember seeing a contractor scope that would have it cut and replaced, and I imagine they would have the material to replace it since they plan to damage it.

Kate Kennedy: If you do pierce that membrane and have to do the repair work and each of the test pits are about 87 linear feet, can I ask that you notify and contact the Conservation Commission.

- Stephen Herzog: When doing the work?
- Kate Kennedy: If anything that happens when doing the test pits and borings that might change the scope of the work.
- Stephen Herzog: Absolutely.

*A motion to close the public hearing is made by Dan Ricciarelli, seconded by Tyler Glode, and passes 5-0.*

*A motion to issue a -2 –6 is made by Tyler Glode, seconded by Dan Ricciarelli, and passes 5-0.*

### III. OLD | NEW BUSINESS

#### **Strongwater Crossing - #64-716 - Minor Modification to Plans**

## Letter of Support – Salem Willows Park Phase II Renovation

Bill Manuell, Wetlands and Lands Management, shares a presentation. Highlights include:

- The commission issued an Order of Conditions to do phases 6-10.
- Comes off Osborne Hill Drive to Strongwater Drive.
- Some wetland crossings with culverts and wetland and intermittent stream crossing
- Open detention basin and stormwater outfalls
- Wetland replication area also approved by Commission
- Construction drawings got rid of retaining wall and culvert with steep float
- All changes are within the approved scope of work and the amount of wetland impact and replication is the exact same
- Planning Board has already determined it as a minor modification and does not need to be amended
- Drawings being peer reviewed
- Changes include
  - Box culvert converted due to 12 percent pitch that was directing water into the wetlands at high velocity. Instead, will be drop inlet manhole that then flattens the slope.
  - Wider wetland crossing had two box culverts and stormwater infiltration area, but now has single 4-sided box culvert with wider opening and eliminated the infiltration area in favor for subsurface chambers that are smaller to pull the outlet back from the edge of the wetlands for better design
  - No changes to intermittent streaming crossing
  - The detention area was an open basin with riprap slope with an outlet and is reengineered to have subsurface infiltration chambers and much of the grading in the buffer zone is eliminated with sustainable vegetative slope
- All ultimately easier to maintain for the City
- Wetland replication is still consistent with the construction drawings
- 350 linear feet of retaining wall has been eliminated and now sustainable vegetative grass slopes
- 

Kate Kennedy: Greg had said to have them supply supporting hydraulic calculations, but we know there are other stream crossing performance standards that need to be met besides the hydraulic calculations. Bill did provide a detailed set of plans that show the span of the structure and openness ratio, and things like that. There is a list of different performance standards that could have been reviewed initially with the crossing, but there have been quite a few changes.

- Dan Ricciarelli: Are you saying those performance standards carry over?
- Kate Kennedy: I know the project is looking to move forward quickly, but Bill if you can speak specifically to storm crossing performance standards or hold a separate meeting if it is time sensitive?
- Bill Manuell: So, the crossing with the intermittent stream channel requires us to meet the stream crossing standards but does not apply to the other two. This crossing will be a box culvert embedded into the ground, there will be some disruption to the channel but that gets restored and there is earth that is stored inside the bottom of the culvert. It is at least 2.5x the bank full width under the culvert. We have an openness ratio greater than 0.82, which is the minimum, and we maintain the preexisting rates of flow once installed. For wildlife, when you provide a crossing with the stream crossing parameters, it is then deemed to have met the wildlife habitat functions since it is being restored to the original grades and functions. We are anxious to put the permitting behind us and did submit a document backing up the hydraulics that is being reviewed by New England Engineering for the City.

Dan Ricciarelli: When do you see that peer review being done?

- Bil Manuell: It is wrapping up now.
- Dan Ricciarelli: Have you seen a draft?
- Bill Manuell: This is close to the final plan right here.

Tom Philbin: I don't know if it was a 4x4 box culvert that was being replaced by a concrete pipe, and it doesn't to have to meet wildlife standards. Are you reducing the size of the culvert?

- Bill Manuell: Yes, the initial problem was that it had a steep grade going from high to low. Since this is bordering vegetative wetland, it is not an intermittent stream channel and does not need to meet the stream crossing standards. It is just a wetland fill. What they have done in this location is they put a drop manhole to allow the street runoff to collect in the manhole and the steeper section of pipe will hit the manhole and the outlet is at a 2% slope for a very low velocity coming out and reduces the opportunity for scowler into the wetland.
- Tom Philbin: The benefit of that is reducing the vertical drop?
- Bill Manuell: Yes, that is right.

Tom Philbin: Is there a third stream or crossing that got reduced, or just those two?

- Bill Manuell: There were three wetland crossing areas, the third is the one with the intermittent stream channel within the wetland and that one was the one that wasn't touched.

Bill Manuell: We do want a letter or memorialize that the plans referenced by the date on them were approved as a minor modification

- Tyler Glode: So, you aren't seeking an amendment?
- Bill Manuell: We were seeking a minor modification so that we wouldn't need an amendment

Dan Ricciarelli: For the peer review, is this just a part of something under review, or is it just this focused piece?

- Bill Manuell: No, it is all of phase 6-10.

Dan Ricciarelli : Do we need to close the public hearing?

- Kate Kennedy: It is not a public hearing or amendment, but there would be something to formalize it.
- Dan Ricciarelli: So, we could draft this and have Greg look at it to see if he has anything to add.
- Kate Kennedy: Yes.

Tyler Glode: I need clarification, why is this not an amendment?

- Bart Hoskins: As a minor modification, we are saying that it doesn't need an amendment.
- Tyler Glode: But the stream crossing is being proposed to be modified from a box culvert to a smaller scenario. I understand that there are no calculations to verify that metrically, and the box culvert was probably originally oversized.
- Bill Manuell: The box culvert change to a pipe is not a stream crossing and the re=engineering is in the footprint of the road and the wetland alteration has not changed.
- Dan Ricciarelli: My understanding is that our purview is whether any of our standards have been impacted or conservation area has been further impacted.
- Tyler Glode: That clarifies it.

Dan Ricciarelli: I think we can direct it for a letter to be drafted and we don't need a motion.

- Bart Hoskins: Yes, our recommendation right now is that this is a minor modification and goes to engineering for backup review
- Bill Manuell: Yes, we just need something to memorialize it in our files.

A motion to approve a minor modification to the record plans listed in the Order of Conditions is made by Dan Ricciarelli, seconded by Tom Philbin, and passes 5-0.

#### **IV. APPROVAL of MINUTES**

July 19 Meeting Minutes  
August 16 Meeting Minutes  
September 20 Meeting Minutes

A motion to approve the meeting minutes for September 20, 2022 and August 16, 2022 is made by Dan Ricciarelli, seconded by Tyler Glode, and passes 5-0.

Dan Ricciarelli: Can we table the July minutes?

- Kate Kennedy: Yes

#### **V. OTHER UPDATES**

Kate Kennedy: There is a letter of support for Phase 2 of the Salem Willows pier and that information is uploaded to the SharePoint folder with some potential archeological research and is in support of that.

Dan Ricciarelli: How are they doing with the Forest River Bridge, has that started?

- Kate Kennedy: Not yet they might need additional funding
- Bart Hoskins: We are about to start the next cycle of the CPA and might be to their benefit and encourage you to put in another application for more money if needed. If you think a design study of some kind is needed the CPA funds can be used for that as well.

#### **VI. ADJOURNMENT**

A motion to adjourn the meeting is made by Dan Ricciarelli, seconded by Tom Philbin, and passes 5-0.

**The meeting adjourns at 8:54 pm.**