BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting **DATE OF CONFERENCE:** April 19, 2023 **LOCATION OF CONFERENCE:** Virtual meeting held via Zoom

ATTENDED BY:

NHDOT

Matt Urban Andrew O'Sullivan Josh Brown Jon Evans Mark Hemmerlein Marc Laurin Chris Carucci Dillan Schmidt Kirk Mudgett Jason Ayotte Meli Dube Arin Mills Kerry Ryan Rhona Thompson

ACOE

Mike Hicks

USCG Absent **EPA** Absent

NHDES Karl Benedict Mary Ann Tilton

NHB Absent

NH Fish & Game Mike Dionne Kevin Newton

Federal Highway Jamie Sikora

US Fish & Wildlife Absent The Nature Conservancy Absent

NH Transportation & Wildlife Workgroup Absent

Consultants/ Public Participants Peter Walker Nicole Martin Frank Koczalka Greg Goodrich James Macpherson Bob Landry Dave Smith

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: (minutes on subsequent pages)

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Finalize Meeting Minutes

Finalized and approved the March 15, 2023 meeting minutes.

Troy-Jaffrey, 43443 (X-A005(110)):

Chris Carucci, NHDOT, Bureau of Highway Design introduced the project, which is a federally funded culvert replacement project on NH Route 124 crossing Perkins Pond at the base of Mt. Monadnock. The proposed project limits begin at Monadnock Street (also known as Troy Road) and extend about 1,400' Northwest. The project is approximately centered on the Troy/Jaffrey Town Line and has an average daily traffic of about 2,190 vehicles per day, with about 5.3% trucks. The posted speed limit on NH 124 within the project limits is 40 mph.

The purpose of the project is to address chronic icing and flooding over the roadway and the poor structural condition of the corrugated metal pipes. NH 124 crossing Perkins Pond would be best described as a causeway-roadway consisting of fill placed across wetlands and/or the open water. The causeway structure dates to the late 1700's or early 1800's, there were no plans located for the original construction or later modifications.

The normal water level within Perkins Pond is controlled by dam owned by the Town of Troy. Three (3) Corrugated Metal Pipes (CMPs) with the dimensions of 42", 48", and 36"x48", each approximately 40' long carry flow under the NH 124 causeway. The pipes are in poor structural condition as well as undersized.

Fasset Brook crosses under NH 124 on the East side of the causeway through a 36" x 48" x 40' CMP which is also in poor structural condition however there is no flooding history associated with the Fasset Brook crossing.

As previously stated, the segment of NH 124 crossing Perkins Pond experiences chronic flooding and icing around 1-3 time per year with accidents reported related to water on the narrow roadway which is approximately 24' in between guardrails. Additionally, there are safety concerns related to bicycle and pedestrian traffic as well as Winter maintenance. Along with the poor structural condition of the CMPs, there is frequent blocking from beaver activity and associated debris.

The preferred alternative includes raising the low point of the roadway about 2 feet and replacing the three CMPs with a single precast concrete box culvert. Due to the height and extent of the profile improvement, the majority of the causeway pavement will need to be removed and reconstructed. Widening the pavement from 24' to 32' is proposed to better accommodate bicycles and pedestrians, and to improve safety for Winter maintenance operations. When viewing the plan, flow is downward from top to bottom. NH 124 generally runs from East-West, with left on the plan towards the Town of Marlborough and right towards Jaffrey. Monadnock Street goes to Troy. The dark green displays the wooded areas with the light-blue hatching as the wetlands and the 100-year floodplain is labeled as 'FP100'.

Resources and design constraints include wetlands and floodplains as the primary concerns. The NH 124 crossing was not delineated as a stream. The majority of the project area on both sides of

the causeway has been delineated as wetlands. The open water areas were delineated as Lacustrine with a Palustrine Emergent border, then Palustrine Forested. Approximately, the total wetland area from aerial photos upstream is 26 acres and downstream is 36 acres.

Fasset Brook, located near the East project limit is Tier 2 stream by drainage area. This crossing is not within the FEMA 100-year floodplain, but it is Zone A, with no flood elevations. The predicted 100-year flood elevation does submerge the culvert inlet and outlet. The Aquatic Restoration Mapper scored this crossing as reduced passage and partially compatible for geomorphology. For the NH 124 causeway crossing, the Mapper did not have an assessment although did have reported flooding history. Perkins Pond is delineated as a FEMA Zone A, 1% annual chance of flooding (100-year flood) with no base flood elevations determined. There is no significant impact to the 100-year flood elevations anticipated for any alternative. Perkins Pond is subject to the Shoreland Water Quality Protection Act (SWQPA). There is minimal tree clearing proposed for any alternative and some additional impervious area will be proposed. There are no anticipated concerns regarding historic or contaminated resources however the existing roadway embankment is considered to be LRS.

There are no records of State-listed threatened or endangered species within the project area. Federally listed species include the Northern Long-eared Bat and Monarch Butterfly. There would be no specific mitigation requirements anticipated for any alternative.

There is no suitable place within the project limits to create stormwater treatment. Alternatives that propose widening the pavement surface would have a minimal impact on impervious area and no significant impact on overall runoff. Construction of stormwater treatment facilities is not anticipated.

The hydraulic analysis point was at the dam / bridge at the Perkins Pond outlet. The pond storage, outlet, and NH 124 crossings are all hydraulically interdependent. The largest storm considered was the (NOAA) 100-year 24-hour rainfall event of 6.95". There are three sub-areas which contribute to flow: Mt. Monadnock, which is 957 acres to the three CMPs conveying flow under the NH 124 causeway, Fasset Brook, which is 622 acres to the CMP at the East end of the NH 124 causeway, and overland flow from around the lower pond which is 202 acres. With the total approximately 1,781 acres.

The NH 124 causeway CMPs are submerged for the majority of the year, the Fasset Brook CMP has significant corrosion and perforations along the bottom with limited remaining structural life. The capacity is very low, the majority of high flow bypasses the culvert and flows into the upper pond. This is due to low ground elevation at the inlet extending about 400' upstream of the culvert inlet. For a 50-year storm, only about 11% of the inflow goes through the culvert (410 cfs in vs 47 cfs out).

The intent of the project is to replace the three CMPs under the NH 124 causeway with a single structure. Design controls include keeping the culvert in the same location to avoid dredging at the inlet and outlet as well as maintaining the NH 124 low point in approximately the same location. Alternatives considered included a larger culvert with the existing NH 124 low point at EL 1227.6 and lowering the permanent pool elevation of the lower Perkins Pond by 6". These alternatives had no significant effect on flood elevations. Lowering the pond elevation by more

than 6" was not considered as it would likely have a significant effect on recreational use. Lowering the pond by any amount would require structural changes to the dam, which could not be justified by the minimal benefit. Consideration of upsizing the Fasset Brook culvert to convey more flow had no significant effect.

For a 50-year storm, the existing Fasset Brook culvert passes only 47 cfs incoming flow. Replacing with larger twin culverts only increased flow to 75 cfs, which is not enough to have a significant effect on NH 124 flood elevations. Additionally, there was no acceptable solution for any combination of the above alternatives.

Raising the NH 124 profile in increments of 6" was considered, calculating the required structure size for each profile are as follows:

For profile low points up to 1228.5, the required structure span was greater than 40' and did not meet Q100 criteria for a Bridge. For a profile low point of 1229.0, the required structure span was 16' and did not meet Q100 criteria for a Bridge. For a profile low point of 1229.5, structure span was 9', and does meet Q50 criteria with a 5' height. Q100 elevation is 1229.36, also below the roadway low point. Increasing the structure height to 6.5' lowered Q100 elevation by 0.25'. The final height of the box would be selected in final design.

Raising the profile to 1229.5 with a 9' span box culvert is the preferred alternative. The 100-year flood elevations upstream of NH 124 would increase slightly, in the range of 2" to 5". There is no upstream development that would be affected by this slight increase and there was no effect on 100-year flood elevations at the dam. Replacing the Fasset Brook culvert should be included as it would be within the paving limits and it has a limited remaining service life. The existing measured size (36" high x 48" wide) is not standard. The pipe may be deformed and there is very little cover. Increasing the rise would not be practical. 57" x 38" is closest available size. The new pipe would be set 3" below streambed to maintain minimum cover and allow for natural sediment accumulation.

Viewing the color profile, brown displays the existing pavement and yellow is the proposed raised profile. The proposed profile is very flat to minimize fill impacts. There would be ponding on the road if water does not drain under guardrail. Four new drainage inlets are included for this case, to address the safety concern with rain or snowmelt on the road in Winter.

Due to the height and extent of the profile improvement, the majority of the causeway pavement will need to be removed and reconstructed. Several alternatives for the reconstructed roadway width and alignment were considered.

Alternative A – Replace causeway in-kind – 24' wide pavement. This alternative would not meet standards for reconstruction or new construction. The guardrail section would be similar to a 700' bridge.

Alternative B – Replace causeway at 28' wide would offer some accommodation for plows and Winter maintenance operations.

Alternative C – Replace causeway at 32' wide. This is the preferred alternative. Alternative C would be a safety benefit during winter maintenance operations and for bicycles and pedestrians. NH 124 is identified as part of the "Desired On-Road Bike Network" in the Draft Statewide Pedestrian and Bicycle Plan. 11' lanes and 5' shoulders are recommended for bicycle accommodation. For Alternative C, the new roadway centerline would be shifted to the right to avoid impacts to the underground power line. Permanent slope easements may be requested from the Town of Troy. Temporary construction easements would be required for any alternative.

Widening the roadway to the left would risk impacts to the underground power line. Shifting to the right would require a few small slope impacts outside the existing ROW on the Parcel owned by the Town of Troy. The maximum shift would be about 4.5'. The slopes in open water areas on both sides of the causeway would be stone lined at 1.5:1. Other areas would be 2:1, vegetated above the normal water level. Widening the causeway or shifting the alignment would not have a significant effect on normal pond water levels, flood storage, or flood elevations.

Construction considerations include:

The existing 24' wide causeway is not wide enough to maintain even one lane of traffic during construction. Placing temporary fill in the wetlands to make room for traffic is not considered practical due to the cost and difficulty of removing the temporary fill and restoring the wetlands. Alternative A (24' roadway) would require a road closure for most of the work. Closure is estimated at 3.5 months, Project duration is estimated at 4.5 months.

Alternative B (28' road) would require a road closure for some operations. Duration of the closure estimated 2 to 3 months. Total project duration estimated 5 to 6 months.

Alternative C (32' road) road could be open for all or most operations. Total project duration would be at least 6 months. Road closure would be preferred for culvert installation and road widening although the closure could be limited to about 2 months.

The detour would be via Monadnock St, NH 12, and Marlborough Road, which are all State maintained roads. The Towns supported closing the road for some operations under Alternative C. Closure would only be practical in the 2024 season as several bridge rehabilitation projects on the detour route are scheduled to begin in 2025.

Culvert replacement will require a fully enclosed sheet pile cofferdam. Dewatering discharge could be pumped to an approved point off the causeway or into tanker trucks. One of the three existing pipes will be used as the temporary water diversion. Construction cost and time estimates assume widening in open water areas would use turbidity curtain only, with stone placed directly in the water. The time and cost of constructing fully enclosed watertight cofferdams and dewatering the work areas would not be practicable. Lowering the pond level would be difficult, the dam does not have a working low flow gate, and the pond is only 6' - 8' deep at most so there would be a significant impact to recreation and aquatic plants and organisms for most of a summer. Fasset Brook water diversion would only be needed for a 1 - 2 days for the pipe replacement. Incoming flow could be ponded up and allowed to bypass to the upper pond as high flows currently do.

Construction Cost estimates for the three roadway alternatives are:

- Alternative A (24' road, road closed) \$1,325,000
- Alternative B (28' road, road open with truck detour) \$1,900,000
- Alternative C (32' road, road open) \$2,010,000
- Estimated Wetland Mitigation payments are not included in the costs.

Alt A = 7,433 SF = 33,000 Alt B ~ 11,250 SF = 50,000 Alt C = 15,031 SF = 67,000

Closing the road for the majority of work for Alternatives B and C could save up to \$400,000 and 1 to 2 months of construction time. Shifting the alignment for Alternatives B and C would not have a significant effect on the construction cost estimate. Alternative A would not address existing safety and maintenance concerns. The long-term safety benefit for bicycles, pedestrians, and the travelling public is the primary purpose for considering a wider roadway. The cost difference between widening alternatives is not significant. One fatal accident or a few injury accidents would exceed the cost increase over Alternative A. Alternative C is the preferred alternative.

Impacts for the preferred alternative include: Permanent Wetland Impacts would be about 14,000 SF, or 1/3 acre which represents about 0.5% of the wetlands adjacent to the causeway. Total volume of fill in the 100-year floodplain would be about 2,500 CY, which is about 1% of the available flood storage volume. Temporary wetland impacts would only be for erosion controls and a cofferdam for the culvert installation. Estimated temp impacts 8,000 SF. Minimal tree clearing, about 800 SF, less than 20 individual trees. New Impervious Area 7,655 SF. Approximately 0.01% of the watershed area. No effect on peak flows or volume of runoff. The new box culvert length would be 42' (vs 40' existing). Four new drainage inlets would outlet to the Pond. There is no proposed curb, so drainage inlets would receive minimal flow unless snowbanks prevent sheet flow from the shoulders. There is no anticipated change to flow, water level, or flood elevations in the lower pond. Less than 6" increase in the 100-year flood elevation upstream of NH 124 and no change downstream. Stream impacts at the Fasset Brook Crossing include a maximum of 100 SF / 10 LF of permanent impacts and a maximum of 600 SF of temporary impacts.

In Summary, the preferred hydraulic solution is to the raise the NH 124 low point by about 2 feet and replace the three metal culverts with a 9' span x 6' high precast concrete box culvert. Replace Fasset Brook culvert, as close to existing condition as practicable with no mitigation anticipated. Replace the gravel pull off / Mt Monadnock scenic view area with 8' wide x 25' long parking area, gravel surface, similar to the existing pull off. The causeway pavement, base, and guardrail will be replaced. Widen the reconstructed roadway from 24' to 32' (Alternative C). Shift alignment right, avoiding impacts to the underground power and no significant change to total impacts. ARM Fund mitigation payment estimated at \$67,000.

Jaffrey Conservation Commission did have some mitigation suggestions, but designing, coordinating, and permitting additional work would not be possible within the project schedule. Alternative C is preferred due to the safety benefits for winter maintenance operations and accommodations for pedestrians and bicycles. The Selectboards of Troy and Jaffrey support Alternative C.

Agency comments and/or questions:

Mary Ann Tilton (NHDES): Looking at the WPPT, it looks like peat lands in the area and one of the big questions as you know that drives our review is the wetlands functional assessment so I just want to make sure we understand any impacts to the wetland's functions as a result of the proposed project. It sounds like it's a widening but there may be direct impacts to the hydrology from the filling. The ACOE talked about the functional assessment unit area under the ACOE highway method and provided clear definition on that which looks at the wetland as a whole so we're trying to make sure we review projects consistent with that.

Andrew O'Sullivan (NHDOT): So, in terms of the wetlands functional assessment, complete the functional assessment then compare existing to proposed?

Mary Ann Tilton (NHDES): Yes, will you be increasing the impoundment like a dam because you're raising the level of the road?

Andrew O'Sullivan (NHDOT): I don't think so, because of the box culvert. It will function better than what is currently there. I'll let Chris speak to that.

Chris Carucci (NHDOT): Yes, that's correct so the existing culverts have minimal capacity compared to the inflow. So, any significant rain goes over the road. In the new case, up to the 100-year storm the flow goes through the box, but the same amount of flow gets transmitted across the crossing. So, there would be no change to overall site hydrology.

Mary Ann Tilton (NHDES): That will be important to include in your functional assessment and impact analysis. In other roadway projects, maybe not intended but elevating the road or changing the hydrology can cause dramatic successional changes and cover types to systems which may bring in more invasives or disturbed species or change the whole type of wetland system as a result of the road, so I just want to make sure that we understood that. It looks like a very unique and interesting area with some recreation in the area, it's used by the public. I just want to make sure we understand the impacts proposed to the system.

Mike Dionne (NHFG): NHFG would support a functional assessment and would love to see the results of that just to be assured that none of the fish and wildlife that are in this area would be impacted by any significant changes to the current wetland situation. Other than that, I think the proposed box culvert should do a much better job of balance in this system.

Kevin Newton (NHFG): I was wondering about Fasset Brook and if upsizing would alleviate some of the stressors there at the dam and current culverts, but it sounds like it would have minimal impact by upsizing. Upsizing the culvert could improve wildlife passage opportunities but as was noted there are no NHB records associated with this area.

Mike Hicks (ACOE): Yes, I think that Chris covered everything. I just want to make a general comment about all the projects moving forward. We have this new IPaC determination key, and we are looking at the new way to do this. I'm not sure if all of your project engineers at the DOT have started using this new system. But they are expecting us to review projects from now on, even the old projects under this new determination key. So, I'll probably be calling you asking

you questions and asking you some things on the IPaC, unless it's a 'No Effect'. That is my only comment overall, and on this project.

Jamie Sikora (NHDOT): No Comment. As Mike was saying, I am aware of the IPaC changes related to the NLEB but this seems a little broader of a process.

Karl Benedict (NHDES): Comments relative to the hydraulic analysis would be that it appears based off drainage area is 1.4 Square miles so that is a tier 3 crossing and is located within the mapped 100-year floodplain so that also happens to be a priority resource area. For the crossing information, there's a couple issues associated with the impoundment. we wouldn't meet 904.01 because there would be some flooding at 100-year storm.

Andrew O'Sullivan (NHDOT): For clarification purposes, in terms of the classification we did not classify it as a stream crossing because it's a pond on both sides, so we didn't follow the 900 rules on this crossing. On the Fasset Brook crossing we did. Are you talking about the Fasset Brook crossing?

Karl Benedict (NHDES): The Perkins Pond crossing. So basically, there is a 1.4 square-mile drainage area that goes through the pond. Then, recognizing the impoundment it still carries a tier 3 stream. It does show up on the WPPT as well. So, the contributing drainage are does seem to calculate at 1.4 square miles. Because there is all of this background information, its really an alternative design. Because we're not quite meeting the 100 year, we're not meeting the 700-foot span, it also doesn't meet 904.9 because of the history of flooding. So, it either has to meet 904.07 for design considerations or alternative design and I think Chris just articulated as to how you got to where you are so I would recommend putting that information into the alternative design narrative.

Andrew O'Sullivan (NHDOT): We can talk offline on this, but I have some questions on meeting the 900 rules and information required for all stream crossings. I just don't think we can get all of that information here. If we're just going into alternative design and if Chris is pretty close to where we need to be then that sounds good.

Karl Benedict (NHDES): I think you've summarized really what you need for alternative design for the most part. Since it's within the 100-year flood plain it also qualifies as a PRA. We need to address that in terms of impacts and mitigation. There was some 10:1 wetland slopes in the typical and some 1.5:1 on the pond side, I wondered if any of the upper portions of those banks could be re-vegetated to the existing condition.

Chris Carucci (NHDOT): It would be possible to intermix some humus on this area above the water. The pond elevation varies seasonally, so maybe we could get a couple feet of vegetated slopes in the pond area. Slopes on the approaches would be 2:1 vegetated.

Karl Benedict (NHDES): It may help to vegetate the slopes rather than riprap. Who is the dam owner and has there been any coordination on that?

Chris Carucci (NHDOT): The Town of Troy owns the dam. We had our presentation to the selectboard very similar to this and the dam doesn't have a working gate and drawing down the pond level wouldn't be practical due to the non-working gate as well as a couple months loss to

the recreation there. The dam doesn't need any structural work I don't believe it has a deficiency from the dam bureau.

Karl Benedict (NHDES): My only question there would be whether the dam bureau or anyone else might need to be coordinated with regarding the additional impoundment during the 100-year storm. I think I understand there would be an additional 6" impoundment upstream. Just throwing that out there that you might need some additional coordination and that summarizes my comments.

Andrew O'Sullivan (NHDOT): Thanks Karl, let's follow up after the meeting on the specifics of the classification and the stream crossing rules. We didn't see it that way so we can have that discussion. I also wanted to say in terms of a work window we didn't see any restrictions, so we anticipated work occurring throughout the year.

Wilton-Milford-Amherst-Bedford, 13692D (X-A004(698)):

Nicole Martin (VHB) presented the Wilton-Milford-Amherst-Bedford 13692D – NH Route 101 Project which involves a 3.9-mile section of NH 101 from approximately Phelan Road to Ponemah Hill Road in Milford, NH. The existing road contains one eastbound travel lane and one westbound travel lane that are separated by a single rumble strip in the center along the double yellow lines with periodic passing zones. The travel lanes are 12 feet wide with 10-footwide shoulders on either side.

Due to high traffic volume and speeds, numerous vehicle crashes (including fatalities) have occurred within the project corridor. Therefore, NHDOT proposes to construct a 6-foot-wide painted median buffer with double rumble strips to further separate the opposing lanes of traffic. To avoid expanding the existing road width, the travel lane width will be reduced to 11 feet and the shoulder width reduced to 8 feet. Most of the work will be contained within the existing paved road, except for some minimal shoulder work (pavement reconstruction and gravel addition), reestablishment of a non-jurisdictional roadside ditch, and up to four potential pull off locations (exact dimensions and locations are still pending). NHDOT will review the locations of the proposed pull offs from the project to ensure they avoid wetland impacts, archaeological impacts, and tree clearing.

No wetland or stream impacts are proposed for any part of this project, so no environmental permitting is anticipated. A NEPA Programmatic Categorical Exclusion will be submitted soon. Consultation with the NHF&G will be initiated soon relative to the potential presence of various turtle and snake species within the vicinity of the project corridor, as identified on the NHB DataCheck report. Northern long-eared bat consultation was completed through the USFWS IPaC system with a not likely to adversely affect determination. This project was approved through the NHDOT-FHWA Section 106 Programmatic Agreement Appendix B Certification.

Comments:

Karl Benedict (NHDES) – no comments.

Mary Ann Tilton (NHDES) – no jurisdiction, no comments.

Mike Dionne (NHF&G) – no comments.

Kevin Newton (NHF&G) requested further clarification on the proposed work beyond the limits of pavement. Nicole clarified by detailing the pavement reconstruction, gravel addition, ditch reestablishment, and potential pull offs. Frank Koczalka (VHB) stated that the current construction timeline is 2024. Kevin said it would be ideal to conduct the proposed work outside of species active season (which is April 1 – October 15) but that conservation recommendations could be worked out during the upcoming consultation.

Mike Hicks (USACE) – no jurisdiction, no comments.

Jamie Sikora (FHWA) – no comments, other than to inquire whether the project is receiving safety funding. Jason Ayotte (NHDOT) mentioned that the project will be requesting Highway Safety Improvement Program (HSIP) funding from the HSIP Committee for this project.

Webster, 40810 (X-A005(217)):

Peter Walker (VHB) presented the proposed replacement of the Clothespin Bridge over the Blackwater River which has been on the Municipal Red List since 2014. This project was previously presented at an NRAM in May 2020. The Blackwater River flows north to south below the Clothespin Bridge. Upstream of the bridge is a steep, incised stream type, which flattens out to a riffle-pool complex downstream. Since the May 2020 meeting, VHB has refined our stream assessment and bridge design. The Blackwater River at the Clothespin Bridge is Rosgen stream type B2c and the average bankfull width is approximately 56 feet. The minimum span requirement is about 79 feet. The existing 65-foot-long bridge is proposed to be replaced with a 107-foot-long bridge that will have a 79.5-foot clear span between the abutment faces (perpendicular to the channel). Therefore, the proposed bridge will be geomorphically and hydraulically compatible with the river, and will comply with NHDES stream crossing rules, Env-Wt 900.

The proposed bridge will be skewed by shifting the eastern abutment south to improve roadway geometry issues on the east bridge approach. A wildlife shelf will be incorporated along each bank parallel to the abutment faces. Additional work includes the replacement of two roadway drainage culverts, reconstruction of the approach roadways, and relocation of aerial utilities. The NH DataCheck Report identified the potential presence of brook floater, Blanding's turtle, wood turtle, and Jefferson/blue-spotted salamander complex within the vicinity of the bridge. The town intends to contract with Ethan Nedeau to complete a mussel survey in advance of construction. Wildlife best management practices will be implemented throughout construction based on coordination with NHF&G.

The USFWS IPaC identified the northern long-eared bat (NLEB), small whorled pogonia (SWP), and monarch butterfly. NLEB consultation is pending updates to the FHWA Programmatic Biological Opinion (PBO) to reflect the reclassification of this species to endangered. Once the PBO is updated, consultation will be conducted using the FHWA Determination Key through IPaC. No suitable habitat for the SWP is present within the vicinity of the bridge and the monarch butterfly is a candidate species that does not require consultation. A Section 106

Cultural Resources Effect Memo (adverse effect) was executed in January 2023 for the proposed replacement of the National Register-eligible bridge, and the consultation is progressing to identify mitigation.

Delineated Wetland 1 and the portion of delineated Wetland 2 located between the river and Clothespin Bridge Road meet the definition of floodplain wetlands contiguous to a tier 3 stream and are therefore classified as Priority Resource Areas (PRAs). The project remains below the 10,000 square foot state impact threshold and 5,000 square foot federal impact threshold and does not trigger mitigation. Furthermore, the proposed replaced bridge will be compliant with the Stream Crossing Rules (Env-Wt 900) and is considered self-mitigating. Therefore, the Town intends to provide an in-lieu fee payment to the Aquatic Resource Mitigation (ARM) Fund only for the permanent impacts to the PRA wetlands.

Comment Period:

Karl Benedict (NHDES) agreed that we correctly identified the PRAs and concurred that the bridge replacement would be considered self-mitigating. Peter confirmed that the riprap within the stream (below ordinary high water) will be embedded with simulated streambed material and that the wildlife shelves will be washed-in/covered with a suitable substrate to facilitate terrestrial wildlife passage. Karl also mentioned that a previous wetlands permit application (NHDES File No. 2017-00571) was submitted for this bridge by a different consultant as part of the state aid bridge (SAB) replacement project and subsequently withdrawn with a pending RFMI. However, it was determined that the current scope of proposed work is different from the previous permit application and that the outstanding RFMI comments do not carry over to this project.

Mary Ann Tilton (NHDES) emphasized that we should consider the wetland functions and values of the entire system to ensure that was considered in the impact avoidance and minimization considerations during the project design.

Mike Dionne (NHF&G) had no comments.

Kevin Newton (NHF&G) thanked the project team for incorporating NHF&G recommendations and requested to see the results of the mussel survey, when available.

Mike Hicks (USACE) mentioned that an Army Corps dam (Blackwater Dam) is located upstream of the Clothespin Bridge and questioned if we should coordinate with the USACE Section 408 Program. Peter mentioned that the dam is located well upstream of the project area and should not be adversely affected by the proposed work. VHB will send him a USGS map with a call out for the dam location to show the distance of this dam from the Clothespin Bridge. Peter also clarified that due to recently programmed federal funding, the FHWA is the lead federal agency now, not the USACE.

Jamie Sikora (FHWA) clarified that bridge replacement should qualify for a Programmatic Section 4(f) Evaluation.

Portsmouth, 43760 (X-A005(230)):

Peter Walker (VHB) presented the proposed construction of three sections of soundwall and one privacy fence along I-95 in the City of Portsmouth. The southern Pannaway Manor Soundwall will consist of two separate sections of wall on either side of the Sherburne Road overpass bridge on the southbound side of I-95. The northern Rockingham Avenue/Edmund Avenue Soundwall is anticipated to be one continuous wall that would go over two overpass bridges (Woodbury Avenue and Maplewood Avenue) on the southbound side of I-95. These soundwalls will reduce highway noise generated from traffic along I 95 within the Pannaway Manor and Rockingham Avenue/Edmund Avenue neighborhoods. A Part Time Shoulder Use (PTSU) Project is anticipated to be completed in 2023 and will result in the part-time opening of roadway shoulders during heavy traffic from approximately Exit 5 in New Hampshire (Spaulding Turnpike/Portsmouth Traffic Circle interchange) to Exit 3 in Maine on I-95. This project required assessment of noise along the corridor as it was classified as a Type I improvement per the NHDOT Highway Traffic Noise Policy (November 2016). Additionally, a privacy fence is proposed between the highway and New Franklin School on the northbound side of I-95 to replace the existing wooden plank fence. All work will be contained within the limits of the NHDOT right-of-way (ROW).

The northern end of the northern segment of the Pannaway Manor soundwall would impact palustrine wetlands (<3,000 square feet), necessitating a Minimum Impact Standard Dredge and Fill Wetlands Permit Application. Some tree clearing is proposed within the ROW. A NEPA Categorical Exclusion is currently being prepared for this project. The NHB DataCheck Report stated that although there was a NHB record present in the vicinity, no impacts are expected; consequently, no consultation with NHB or NHF&G is required for this project. The USFWS IPaC Report identified the northern long-eared bat (NLEB) and monarch butterfly. Consultation for the NLEB was completed using the FHWA Determination Key in IPaC which resulted in a not likely to adversely affect (NLAA) determination. Since the monarch butterfly is a candidate species, no consultation is required.

A Section 106 consultation is in progress. A Request for Project Review (RPR) was sent to NHDHR. NHDHR responded in February 2023 that they have no archeological concerns, however, potential visual impacts associated with the proposed tree clearing are still under review. Finally, there is ongoing coordination with NHDES on requirements to address potential interaction with PFAS intercepted in groundwater.

Comments and Questions:

Karl Benedict (NHDES) requested that consideration of invasive species (which VHB mapped), vernal pools, and look further into the potential PFAS impacts as there are known PFAS groundwater impacts in proximity to the area. Peter confirmed that no vernal pools were identified during the natural resource delineation field work. Peter also confirmed that VHB was aware of invasive species within the project area and will address them.

Mary Ann Tilton (NHDES) stated that since the project proposes such minimal impacts, she had no concerns.

Mike Dionne (NHF&G) inquired about what the NHB record was on the DataCheck Report. Nicole and Pete clarified that the report did not disclose the record but said that no impacts are expected to result from the proposed project.

Kevin Newton (NHF&G) had no comment.

Mike Hicks (USACE) had no comment.

Jamie Sikora (FHWA) said that hopefully people are coordinating with FHWA for the proposed shoulder use and emergency pull offs. Jon Evans (NHDOT) indicated that Maine DOT is leading the PTSU and coordinating with their FHWA office on such.