

# City of Berlin, NH

City Manager's Office



November 20 2017

District 1 - Northern Region  
Philip Beaulieu, District Engineer  
641 Main Street, Lancaster NH 03584

Re: Potential Relocation of Urban Compact on Rte. 110 in Berlin

Dear Mr. Beaulieu:

Thank you for continuing our discussion regarding the location of the urban compact line on Rte. 110 as it relates to the growing OHRV industry in the City and the region. As you know, the City has been weighing the positives and negatives of extending the compact further out on Rte. 110 possibly as far as the Jericho Lake Road.

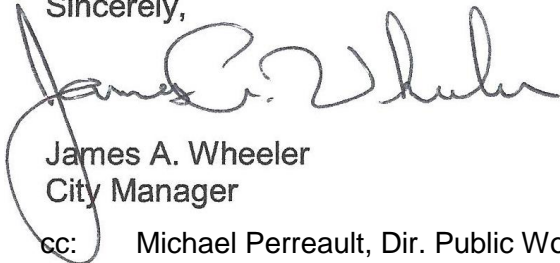
As we've discussed, movement of the current compact would give the City flexibility in authorizing OHRV use within the new compact. However, this would come with a significant financial liability to the City in both operational and capital costs. In order to mitigate these costs we would like to propose the following general items of agreement:

1. Relocation of urban compact line to intersection of Jericho Lake Road
2. NHDOT upgrades drainage structures within section defined by old and new compact line.
3. NHDOT performs crack filling on section.
4. NHDOT overlay's section with 1-1/2" of top course.
5. NHDOT agrees to de-ice and plow through State designated routes in the City (Rte. 110 and Rte. 16) for winter operations.
6. The City and NHDOT Div. 1 will jointly pursue a full upgrade to the relevant section of Rte. 110 as part of the 10 Year Plan.
7. NHDOT completes previously defined work outside the urban compact on East Milan River Road.

Please let me know if you have any questions regarding this proposal. We look forward to hearing from you.

Thank you for considering this request.

Sincerely,



James A. Wheeler  
City Manager

cc: Michael Perreault, Dir. Public Works  
Pamela Laflamme, Community Development Director



**Victoria F. Sheehan**  
**Commissioner**

**THE STATE OF NEW HAMPSHIRE**  
**DEPARTMENT OF TRANSPORTATION**



**William Cass, P.E.**  
**Assistant Commissioner**

February 6, 2018

City of Berlin  
Attn: James Wheeler – City Manager  
168 Main Street  
Berlin, NH 03570

**RE: Relocation of Urban Compact on NH-110 in Berlin**

Dear Mr. Wheeler:

This letter is being written in response to your November 20, 2017 correspondence with regards to the potential relocation of the urban compact line on NH-110. The Department has considered your request for this potential relocation and has the following to offer:

1. *Relocation of urban compact line to intersection of Jericho Lake Road.* The Department recognizes the importance of the OHRV industry on the North Country and the City of Berlin in particular. We are aware of the value this corridor has as it relates to OHRV tourism and the possible expansion of OHRV based businesses. We are also aware of additional OHRV focused businesses located west of Jericho Lake Road and would urge the City to consider extending this limit further west to encompass these other businesses.
2. *NHDOT upgrades drainage structures within section defined by old and new compact line.* The Department agrees to conduct a drainage inventory in the spring to determine the adequacy of the existing drainage within this section of NH-110. Drainage infrastructure in need of repair will be repaired or replaced as necessary by the Department prior to relocating the urban compact line.
3. *NHDOT performs crack filling on section.* Based on the current crack density of this section of highway, the Department would not recommend crack sealing for this roadway at this time. Crack sealing a roadway with a high crack density would be fairly expensive, yield minimal benefit, and require more in-depth follow up pavement treatments.
4. *NHDOT overlay's section with 1-1/2" of top course.* This section of NH-110 was last paved in 2014 with a 3/4" paver shim. Prior to that a 5/8" paver shim was placed in 2005. Based on the schedule of previous treatments and the current condition of the road, the Department recommends the proposed treatment be another 3/4" paver shim. This proposed treatment would likely maintain the roadways current condition until a more comprehensive project could be accomplished through the 10-year plan process.

5. *NHDOT agrees to de-ice and plow through State designated routes in the City (Rte. 110 and Rte. 16) for winter operations.* The Department does not agree with providing any maintenance including winter maintenance operations for any designated State routes within the urban compact limits.
6. *The City and NHDOT Div. 1 will jointly pursue a full upgrade to the relevant section of Rte. 110 as part of the 10 Year Plan.* The Department would be willing to assist in developing a project for submission into the State's 10-year plan. However, the Department cannot guarantee inclusion of this project due to the formal process that exists for advancing these projects through the program. The standard process involves the municipality working with the local Regional Planning Commission (RPC) and their respective Transportation Advisory Committee (TAC). In this case, we suggest working with the North Country Council to put forward a proposed project through the established process. The Department would provide limited support to assist in initial planning and developing the estimated work efforts and associated costs to support the project proposal.
7. *NHDOT completes previously defined work outside the urban compact on East Milan River Road.* In 2014, the District 1 office attempted to conduct a road rehabilitation project on a section of East Milan Road in Berlin. Due to the lack of appropriate funding at the time, the project was tabled. Currently the Department continues to lack the available funding to move the project forward. Unfortunately it is unlikely that the project would be built as originally proposed as part of this agreement.

If you require additional information or have any questions, please don't hesitate to call either myself or District 1 Engineer Phil Beaulieu.

Sincerely,



William Cass, P.E.  
Assistant Commissioner

cc: D. Rodrigue  
P. Beaulieu

## **Excerpt from 8/21/2017**

### **Route 110 Urban Compact**

Mr. Wheeler explained that he spoke with Phil Beaulieu, the local DOT Principal Engineer about extending the urban compact on Jericho Road. DOT would not do a full reconstruction but would reconstruct drainage to include six culverts and they would do a grind and one inch overlay on the road. The city would be faced with a more significant upgrade in the future. Funds provided for projects on the ten year plan receive 80% funding and the City would be responsible for 20%. The City would be taking on a section of roadway that we do not currently plow or maintain drainage. That section of road has had inherent drainage problems where the water runs in the road and we would have to respond. Councilor Remillard asked how long culverts can be expected to last and Mr. Wheeler replied that typically it would be a 20 year life and road repair would be about ten years. Councilor Nelson advocated for the City to move the urban compact to Jericho Outdoors. Noting the expense of taking on the additional highway, Mr. Wheeler recommended not to do it.

Councilor Remillard asked if the State would withdraw the offer if the City doesn't act and Mr. Wheeler felt certain that the State would give up the road. He said that there is no rush to take on the road since all the businesses currently have access to the trails. He suggested waiting until there is a need. Councilor Nelson stated that she would prefer not to wait since we would lose the economic benefit from November to May. Councilor Remillard asked for clarification and Councilor Nelson stated that Jericho Park and city streets are still open November through May; they are only closed in mud season. Councilor Rozek indicated that OHRV's are not allowed on city streets when trails are closed. Mayor Grenier suggested having another discussion with the Police Chief present to get further clarification. Mayor Grenier asked if the State would change culverts as needed or will it need to be an immediate project. Councilor Rozek asked if there is a time limit and do we want to do this year or next year. Mayor Grenier stated that the issue could be discussed further at a future meeting.

## **September 18, 2017**

### **Route 110 Urban Compact**

Mr. Wheeler read a letter from Steve Binette into the record. September 5, 2017 James Wheeler City Manager City of Berlin, New Hampshire Mayor City Council Members City of Berlin, New Hampshire Dear City Manager and Council Members, As a developer, business owner, and taxpayer of the City of Berlin, I am writing this letter to address my view on the urban compact extension along Jericho Road. It is my belief and the belief of many others that the extension of the urban compact from its current limit on Jericho Road to the Jericho Trailhead will benefit the growing and developing Jericho Gateway area and desperately needs to move forward. Not only would the acquisition of the additional 1.6 miles of roadway help to solidify and expand future ATV access to our city by giving the city control over ATV use on this section of roadway, it would also promote and encourage further development near Jericho Mountain State Park, so that the city can fully capitalize on the growing ATV movement that has brought and continues to bring a significant amount of tourism to our region.

As you are likely well aware, many significant investments in the Jericho area by local Developers and Binette Realty LLC. have already been made. At Binette Realty, we plan to continue to develop in the



Jericho Road area. However, delaying or avoiding the acquisition of this section of Route 110 will be detrimental to our development plans, the development plans of others, and subsequently the development of the Jericho Gateway zone. Therefore, I am requesting that a public meeting be held with the City Manager and City Council members present. At this meeting, myself and other Jericho developers will address our concerns and will present how the urban compact will not only benefit the development on Jericho road, but also how it will benefit the city. Please feel free to reach out to me with any questions via email at [steven@rayselectricinc.net](mailto:steven@rayselectricinc.net) or via phone at 752-1370. Looking forward to your response. Regards, Steven Binette Binette Realty LLC.

Mayor Grenier asked to open the meeting to comments from the public and Councilor Rozek moved to allow; Councilor Remillard seconded and the motion carried.

Steve Binette opened by saying that Binette Realty has invested in the Jericho Gateway area. His business at Valley Creek Eatery has seen an influx of tourists; however he is reluctant to invest more until there is some certainty that the city will have control over the area.

Bob Chapman voiced his support for extending the urban compact because he wants to go forward with the development on the former Bass Shoe property. The highway needs to be taken over so that investors can be informed with certainty that the city has control of the road. He also advocated for the city to take over up to Jericho Lake because there is development planned above. He expressed the need to know about the new zoning that was changed and what it means for businesses.

Matt Carter, Manager at the Dalton Store stated that it is critical to have access to the front driveway of the business. ATV use now ends at Jericho Outdoors and there is a dead area of 300 feet. If the city had control, it would be easier to resolve the gray areas of the law and it would attract more businesses. With the State, businesses deal with a lot of resistance. He is in favor of leaving the roadway out of the hands of the state and having it go to the city. Roland Berthiaume commented that he is working on the campground on 110. There is no way to get to Jericho from late fall to the end of mud season. Having the City control the area would give the ability to drive to the convenience store. He advocated moving the urban compact at least to the G. Housen building. Sheriff Brian Valerino stated that he was asked to be here on behalf of the Police Department adding that he wrote the ordinance. He said that the ordinance was written so that the streets close when the State closes the trails. There is one month where the state is closed and the city is open. He emphasized that consistency is important so that visitors to our area are not confused.

Bob Rodrigue representing White Mountain Ridgerunners expressed some concern that extending the urban compact will bring ATV riding to snowmobile trails causing deep ruts that could be a safety issue. He stressed he and the snowmobile club are ATV enthusiasts who work to build and maintain the trails. He suggested that a monitoring system for trail conditions could be created to advise when the trail can support an atv and when soft conditions would not allow riders. Mr. Rodrigue said that he supports the extension and he wants the Council to also consider the sledding side when the decision is made. Mayor Grenier asked if there is a process that has begun with the Trails Bureau to address some of the issues. Mr. Rodrigue noted that there has been some discussion with Clint Savage. It may be possible to keep ATV's off of the main snowmobile trails where the ATVs would only diagonally cross the snowmobile trails. Mayor Grenier said that there needs to be elevated communication between those who maintain the trails to put together a plan for winter and early fall. Matt Carter commented that Maine may have a law that could be reviewed that allows atvs if snowmobile trails are frozen. Mr. Rodrigue also suggested

that atv's could have full access until 12/15 when the snowmobile trails open. Mayor Grenier stated that he did not hear anyone opposed to extending the urban compact to the entrance of Jericho Lake Park. Councilor Nelson supported extending to the G Housen building, saying that Jericho Lake is other things besides ATV riding. Extending to Jericho Lake puts the ATV's in with traffic.

Mayor Grenier thanked all for coming and giving insight.

The City has been in contact with DOT regarding this issue. The Council will continue the conversation in non-public session. Steve Binette questioned whether this issue will be resolved prior to the winter. He added that he may not invest in the winter months if there is no decision. When the opportunity for investment arises, the property has to be ready or the investor will walk away.

## **October 23, 2017**

### **Sewer Service Alternatives for Route 110**

Mr. Wheeler reported that Wright Pierce has evaluated the Bass Shoe/Dead River pumping station which is in poor condition. As development seems eminent on Route 110, Wright Pierces analyzed the needs taking additional development into account. They found that the pumping station could be upgraded at its current location at a cost of \$590,000. Councilor Otis entered the meeting at this time. Mr. Wheeler noted that he contacted the owners of the campground about timing and they informed him that it is not realistic to think the campground will be done next year. We know there will be development but we don't know how quickly it will happen. There is only one house that is serviced by the pump station. We want to be ahead of development but don't necessarily want to upgrade the station without knowing more about the development.

Mr. Wheeler suggested going forward with the design so that there is a shovel ready project. Councilor Rozek asked if we've checked on federal grants adding that this is an opportunity to apply for federal money and a perfect project for Bill Hounsell. Councilor Higbee confirmed that the project would not include the extension of the sewer system. Councilor Rozek asked if this would be a candidate for a CDBG grant. Mayor Grenier noted that CDBG has low income requirements that have to be met and because this is a speculative project, it may not be eligible.

Mayor Grenier summarized the question before the Council as: 'do we want to pay for the design of a pumping station upgrade to have a project ready to go when an announcement is made or do we get more information on alternative funding for this type of design.' He also noted that if there is an announcement, in the time a project needs to be permitted and built, we can upgrade the pumping station. The consensus of the Council was to explore funding options before moving forward with design.

April 9, 2019

City of Berlin City Council  
168 Main St  
Berlin, NH 03570

**Re: City of Berlin FY 2021-2030 Ten Year Plan Project Proposals**

This letter is intended to communicate an update regarding the City of Berlin's project proposals for the FY 2021-2030 Statewide Ten Year Transportation Plan (TYP). The New Hampshire Department of Transportation (NHDOT) recently completed their review of proposed TYP projects for the North Country Council region. The information in this letter is intended to communicate the results of this review, as well as potential next steps for the City.

As a part of the project review process, NHDOT engineers developed cost estimates and proposed timelines for project proposals. New TYP projects are typically scheduled for construction in the last two years of the TYP (FY 2029 or FY 2030), with preliminary engineering and right-of-way work beginning earlier in the TYP. In order to account for future increases in construction and engineering costs, NHDOT incorporates an assumed 2.55% annual inflation rate in their cost estimates. In addition, NHDOT also considers project elements such as construction management costs and potential utility relocations.

For the FY 2021-2030 TYP round, the NCC planning region was allocated \$6.1 million in funding for new Ten Year Plan projects. The cost estimates provided by NHDOT are useful in determining which proposed projects will fit within the regional funding allocation.

In summary, the City of Berlin's project proposals (NH 16 and NH 110) for the FY 2021-2030 TYP each received cost estimates from NHDOT that exceed NCC's regional allocation of \$6.1 million for new TYP projects. Therefore, adequate funding does not currently exist to support the inclusion of either project in the FY 2021-2030 TYP.

While these projects are not eligible for consideration for the FY 2021-2030 TYP, revised, phased, or scaled-down versions of these projects could be submitted to future Ten Year Plan rounds. NCC can work with the City of Berlin to develop phased, "right-size" proposals that can fit within the regional funding allocations of future TYP rounds. This would include direct technical assistance from NCC transportation planning staff for project development and/or public outreach and participation. Additionally, NCC is evaluating opportunities for providing access to professional engineering services for communities to support the development of project proposals for future TYP funding rounds.

The remainder of this letter includes specific feedback about both project proposals, including NHDOT cost estimates and comments. I encourage you to contact me with any questions.

**Project Proposal #1: NH 16 reconstruction and rehabilitation; sidewalk improvements**

Project Phase	City of Berlin Proposal	NHDOT Cost Estimate
Preliminary Engineering	\$350,000	\$936,755 (FY 2024)
Right-Of-Way	\$35,000	\$524,810 (FY 2027)
Construction	\$3,500,000	\$10,329,000 (FY 2029)
<i>Total</i>	<i>\$3,885,000</i>	<i>\$11,790,565</i>

NHDOT's overall cost estimate for the proposed NH 16 project is \$11,790,565. Since this project is located within the City of Berlin urban compact, the project would include a 20% local match, bringing the TYP funding request down to \$9,432,452. Even with this reduction, the TYP portion of the project budget exceeds the NCC regional allocation of \$6.1 million for new TYP projects. Therefore, adequate funding is not available to support the inclusion of the proposed NH 16 project in the FY 2021-2030 TYP.

Reasons for the increase in the cost estimate for this project include:

- Using previous NH 110 project (project #12958B) costs, assumption of \$8,000,000/mile reconstruction costs.
- Assumption of 2.55% annual inflation.
- Required relocation of both aerial and underground utilities, particularly between Hutchins St and Exchange St.
- Large number of residents, businesses, and associated driveways in project area adds to complexity of project and construction management costs.
- Sidewalk widening in certain areas for ADA compliance.
- Retaining wall design/improvements between Hutchins St and Exchange St.

Additional potential considerations for this project (not included in NHDOT cost estimate):

- Potential challenges/costs with sidewalk reconstruction due to proximity to residential retaining walls.
- Intersection improvements in Exchange St area.

**Project Proposal #2: NH 110 reconstruction and rehabilitation**

Project Phase	City of Berlin Proposal	NHDOT Cost Estimate
Preliminary Engineering	\$415,000	\$1,180,068 (FY 2024)
Right-Of-Way	\$100,000	\$262,405 (FY 2027)
Construction	\$4,150,000	\$10,963,389 (FY 2029)
<i>Total</i>	<i>\$4,665,000</i>	<i>\$12,405,862</i>

NHDOT's overall cost estimate for the proposed NH 16 project is \$12,405,862. This cost estimate exceeds exceeds the NCC regional allocation of \$6.1 million for new TYP projects. Therefore, adequate funding is not available to support the inclusion of the proposed NH 16 project in the FY 2021-2030 TYP.

Reasons for the increase in the cost estimate for this project include:

- Assumption of 2.55% annual inflation



- The project area of NH 110 currently features 12-foot travel lanes with minimal (0 – 1 foot) shoulders. Full reconstruction of the roadway would require NHDOT to upgrade the roadway to current standards, including a 4-foot shoulder. Widening of roadway would lead to additional costs related to construction, right-of-way acquisition, and relocation of aerial utilities. Roadway widening would also require widening of the E-2 posted Jericho Brook Bridge (near St. Laurent Lane).
- Full depth reconstruction of roadway involves significant Traffic Control Plan requirements, increasing construction management costs.

Additional potential considerations for this project (not included in NHDOT cost estimate):

- Full depth reconstruction prior to NHDOT turning roadway over to a municipality is atypical. Typical improvements would include resurfacing, and potentially mill and fill or reclamation of roadway.
- A wider shoulder than 4' would be preferable if being proposed for using OHRVs. Any additional shoulder widening beyond 4' would be need to be funded by the City of Berlin. This would include right-of-way and drainage costs.

Sincerely,



Alex Belenz  
Planner  
North Country Council  
[abelenz@nccouncil.org](mailto:abelenz@nccouncil.org)  
(603) 444-6303 x2012

CC: James Wheeler, City Manager  
Pam LaFlamme, Community Development Coordinator  
Eric Grenier, Public Works Director

## Initial Priority #5: NH 110 roadway reconstruction and rehabilitation (Berlin)

**Project summary:** declining roadway conditions, increased development activity and need for access management, lack of local control over key economic development corridor, restrictions on ATV/OHRV access. Project Background: ATV/OHRV activity has increased significantly in recent years and is a major economic driver for Berlin and the surrounding region. In addition to increased ridership, a number of powersport businesses have opened along NH 110. Scope of Work: 1) mill and overlay NH 110 from the end of the Phase NH 110 project to the current urban compact line; 2) full road reconstruction from the current urban compact line to Jericho Lake Rd (new proposed urban compact line). All phases of engineering are likely. Significant ROW expenses are not anticipated.

### Review Comments

- It would appear that Berlin would like the roadway improved with the understanding they would take maintenance responsibility over. Ultimately so they can allow ATV use on NH110 from the City to Jericho Lake State Park. Which is currently a trail gap.
- Part 1: Mill and fill from Rocky Lane (Berlin Public Works) to urban compact line.= 0.75 miles
- Part 2: Full depth reconstruction from urban compact line to Jericho Lake Road = 2.0 miles
- Current typical is a 12-0, so any improvement will be widening the roadway, assume an 12-4 typical, several properties close to road, access management for commercial properties is a big issue, any roadway widening will have property impacts, affecting parking, drives, retaining walls, etc..
- Utilities are very close to the road, any widening will require full aerial line relocation.
- Jericho Brook (south end) under NH110 near St. Laurent Lane is a bridge (E-2 posted) and would require widening to meet new typical width.
- Jericho Brook (north end) under NH110 near St. Laurent Road is a bridge but may not require widening it appears to be a 12-4 typical on the bridge.
- If the shoulder is for ATV use and due to this there is a need to have a wider shoulder than 4' the City should pay any additional cost beyond the 4' shoulder width. This should also include the added ROW, drainage, water quality, etc. due to the wider shoulder.
- Historically NHDOT would typical resurface (maybe mill/fill or reclaim) a roadway prior to turning over maintenance responsibility to the Community. Full Depth Reconstruction as proposed is atypical.
- Traffic Control Plan requirements in the full depth section will be very difficult and costly due to the narrow ROW width, increased typical section width, and the 4-5' depth a full depth reconstruction will require.
- Part 1: Mill and fill from Rocky Lane (Berlin Public Works) to urban compact line.= 0.75 miles. Assume 2" mill and 3" overlay @ \$700,000/mile = \$550,000 CON, CE=\$50,000, PE=\$20,000, ROW=\$0.00.
- Part 2: Full depth reconstruction from urban compact line to Jericho Lake Road = 2.0 miles
- Assume typical is 12-4, minimal retaining wall repair work, driveway restrictions required, assumes no intersection changes. Based on reclaim and step box widening for shoulders, assume full depth HBP. \$3,000,000/mi. reconstruction costs. 2.0miles x \$3.0M/mi = \$6,000,000 CON, CE=\$300,000, PE=750,000, ROW=\$200,000
- Jericho Brook (south end) under NH110 near St. Laurent Lane is a bridge (E-2 posted) and would require widening to meet new typical width. Assume; \$750,000 CON, CE= \$100,000, PE=\$200,000, ROW=\$0
- Jericho Brook (north end) under NH110 near St. Laurent Road is a bridge but may not require widening it appears to be a 12-4 typical on the bridge. Assume no work except overlay, so costs are included in roadway work. Maybe guardrail upgrade, no widening.

### Review Summary

- NHDOT review identified a total estimated cost of \$ to complete the proposed project scope.
- Values presented below represent the project commencing with PE in 2024; ROW in FY 2027; and CON in 2029.
- The proposed project would use **\$12,405,862** of the regional allocation for the 2021-2030 Ten Year Transportation Plan.
- If this project were selected, the proposed scope would need to be aligned with available funds. Estimated costs currently exceed the available regional allocation.
- The Year-of-Expenditure (YoE) values include inflation of 2.55%/year and indirect cost rate of 10%/year.

**Funding**

<b>Phase</b>	<b>NCC 2019 Estimate</b>	<b>2019 NHDOT Estimate</b>	<b>YoE</b>
PE	\$415,000	FY 2024: \$970,000	FY 2024: \$1,180,068
ROW	\$100,000	FY 2027: \$200,000	FY 2027: \$262,405
CON	\$4,150,000	FY 2029: \$7,750,000	FY 2029: \$10,963,389
<b>Total</b>	<b>\$4,665,000</b>	<b>\$8,920,000</b>	<b>\$12,405,862</b>



## Pamela Laflamme

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**From:** Eric Grenier  
**Sent:** Friday, November 09, 2018 10:18 AM  
**To:** Pamela Laflamme; Jim Wheeler  
**Subject:** RE: Proposal questions

### Route 110

#### Part 1 – Problem

- Currently, the City of Berlin urban compact along Route 110 does not encompass all of the developable area within this corridor. Since the ATV boom, development has started in this area, however it is hindered by the City's lack of control of this corridor. NHDOT currently controls and maintains this section of Route 110.
- The objective is to coordinate with NHDOT to reconstruct the corridor (approx. 2 miles) and in turn take over control and maintenance responsibilities for this corridor. This will help spur development along the corridor.
- In addition, the City would like to tie this corridor into the end of Phase II Route 110 (Completed in 2017) with a mill and overlay, such that the entire corridor has been upgraded.
- Focusing on multi-modal transportation systems, this corridor is heavily used and is the primary access to the Jericho Mtn State Park and Head Pond trail systems. After October 31<sup>st</sup>, this corridor is closed to ATVs by NHDOT, however the trail systems are still open.

#### Part 2 – Need

- The city needs to control this corridor to help spur economic development.
- NHDOT would like to give the City responsibility of this section of road.
- Additionally, the roadway corridor needs to be reconstructed, as the pavement structure and drainage systems are in need of repair.
- The commitment of limited resources to this corridor will hopefully, in turn, produce additional revenues for the city. It is critical that the city take this corridor on after it is reconstructed, such that revenues can be maximized and defer maintenance costs.

#### Part 3 – Goals

- Improve the corridor conditions for all users (vehicular, pedestrian, bicycles etc.).
- Control/expand the urban compact to Jericho Mtn State Park to spur economic development in this corridor.
- Improve roadway infrastructure (pavement structure, drainage facilities etc.) to improve corridor sustainability and increase the longevity of the system.
- Improve access to local businesses and promote development along this corridor. Make an attractive gateway to help promote development within the city.

#### Part 4 – Project Description

- Transportation problem – declining roadway conditions and aging drainage systems leading to reduced roadway function, user rideability, and pedestrian safety/accessibility concerns.
- Lack of ultimate control of this roadway to the Jericho Mtn. State Park hinders long term development potential and marketability of properties along this corridor. Extending the urban compact to the Jericho Mtn. State Park improves the economic viability of these properties.
- Scope of Work – mill & overlay from end of Phase II Route 110 project (near PWD garage) to the current urban compact. Full road reconstruction from current urban compact line to Jericho State Park (proposed urban compact line). Reconstruct sidewalks, improve ADA accessibility etc. All phases of engineering are likely required.

#### Part 5 – Resiliency



- Drainage facilities within the project area were installed a long time ago. Since weather patterns and frequency and severity of storm events are changing, it is likely that the current facilities are inadequate (in both condition and size).
- This project is located along and is part of the DEAD RIVER??? watershed. Implementation of adequate roadway and secondary drainage systems will help mitigate and prevent flooding along this corridor.

Total cost for mill & overlay from Phase II Route 110 - \$250k  
Reconstruction from Urban Compact to Jericho Park – \$3.9m

Eric Grenier, PE  
Public Works Director  
City of Berlin  
168 Main Street  
Berlin, NH 03570  
(603)752-8551

**From:** Pamela Laflamme  
**Sent:** Tuesday, November 06, 2018 12:02 PM  
**To:** Jim Wheeler <[jwheeler@berlinnh.gov](mailto:jwheeler@berlinnh.gov)>; Eric Grenier <[egrenier@berlinnh.gov](mailto:egrenier@berlinnh.gov)>  
**Subject:** RE: Proposal questions

I should add points for both Route 16 and Route 110...

**From:** Pamela Laflamme  
**Sent:** Tuesday, November 06, 2018 11:45 AM  
**To:** Jim Wheeler <[jwheeler@berlinnh.gov](mailto:jwheeler@berlinnh.gov)>; Eric Grenier <[egrenier@berlinnh.gov](mailto:egrenier@berlinnh.gov)>  
**Subject:** Proposal questions

This is from the guidance document that goes along with the proposal...

Any bullet points that I can spin into concise sentences are appreciated! I've started writing but could use some perspective from the point of view of an engineer or two...

## North Country Council - Ten Year Plan Project Proposal Form

### Applicant:

- ☐ City/Town of: Berlin
- ☐ Planning Commission
- ☐ NH DOT
- ☐ Transit Agency: \_\_\_\_\_
- ☐ Other (Specify): \_\_\_\_\_

Road(s): NH Route 110

Length: Approximately 2 miles

### Contact Person:

Name: Pamela Laflamme

Title: Community Development Director

Address: 168 Main Street Berlin, NH 03570

Phone: 603-752-8587

e-mail: plaflamme@berlinnh.gov

From/To: Berlin Public Works Garage to Jericho Lake Road

City/Town: Berlin

### Description of Proposal Location

Priority 2 of 2 proposals.

This proposal is for rehabilitation and reconstruction of NH Route 110 within and beyond the City's urban compact boundary up to its intersection with Jericho Lake Road at Jericho Mountain State Park. The urban compact boundary line exists just beyond the Eversource substation on NH Route 110 at the property line of 92 Jericho Road. See attached map for further details.

The Purpose and Need Statement should describe the intent of the proposal, and the appropriateness of any proposed solutions in solving identified transportation-related issues and/or meeting any other listed goals and objectives.

### Project Purpose: what problem(s) is the proposal addressing, and how is it addressed by the proposed project?

Currently, the City of Berlin urban compact along Route 110 does not encompass all of the developable area within this corridor. Since the ATV/OHRV boom, development has started in this area, however it is hindered by the City's lack of control of this corridor. NHDOT currently controls and maintains much of this section of Route 110.

- The objective is to coordinate with NHDOT to reconstruct the corridor (approximately 2 miles) and in turn take over control and maintenance responsibilities for this corridor. This will help spur development along the corridor.
- In addition, the City would like to tie this corridor into the end of Phase II Route 110 (Completed in 2017) with a mill and overlay, such that the entire corridor has been upgraded.
- Focusing on multi-modal transportation systems, this corridor is heavily used and is the primary access to the Jericho Mountain State Park and Head Pond trail systems. After October 31st of each year this corridor is closed to ATVs by NHDOT, however the trail system at Jericho Mountain State Park stays open nearly year round.

### Project Need: what are the specific transportation deficiencies or problems to be addressed? Is evidence available to support the need for the proposed project? For example: crash history, turning movement counts, signal warrant analysis, etc.

- The city needs to control this corridor to help spur economic development - we have heard this from users of the OHRV trails as well as local business owners.
- NHDOT would like to give the City responsibility of the section of road that is outside of our urban compact.
- Additionally, the roadway corridor needs to be reconstructed, as the pavement structure and drainage systems are in need of repair.
- The commitment of limited resources to this corridor will hopefully, in turn, produce additional revenues for the city. It is critical that the city take this corridor on after it is reconstructed, such that revenues can be maximized and defer maintenance costs.

### Goals and Objectives: list the goals and objectives of the project. Beyond those mentioned in the Purpose statement, what other issues will be addressed by the proposed project?

- Improve the corridor conditions for all users (vehicular, pedestrian, bicycles etc.).
- Control/expand the urban compact to Jericho Mountain State Park to spur economic development in this corridor.
- Improve roadway infrastructure (pavement structure, drainage facilities etc.) to improve corridor sustainability and increase the longevity of the system.
- Improve access to local businesses and promote development along this corridor. Make an attractive gateway to help promote development within the city.



## North Country Council - Ten Year Plan Project Proposal Form

**Describe the proposed project.** Also include: a) problem statement, b) project background, and c) preliminary scope of work.

- Transportation problem – declining roadway conditions and aging drainage systems leading to reduced roadway function, user rideability, and pedestrian safety/accessibility concerns.
- Lack of ultimate control of this roadway to the Jericho Mountain State Park hinders long term development potential and marketability of properties along this corridor. Extending the urban compact to the Jericho Mountain State Park improves the economic viability of these properties.
- Scope of Work – Mill & overlay from end of Phase II Route 110 project (near the Public Works Department garage) to the current urban compact line. Full road reconstruction from current urban compact line to Jericho Lake Road (proposed urban compact line). Improve ADA accessibility. All phases of engineering are likely required.

**Alternatives:** have any alternatives to the proposal described above have been considered, evaluated, or implemented?

At this time the alternatives include - do nothing, do the project on our own up to the urban compact line only or apply for TYP funding. We have not closely evaluated other alternatives at this time having just completed several major road projects here in the City.

**Outreach:** describe the extent of public outreach and involvement efforts to date and anticipated future efforts for the proposal:

This topic has actually had several iterations of conversations among the City Council, local business owners, local ATV clubs and riders. There have been many conversations back and forth with NHDOT about the viability and practicality of taking over new miles of roadway as we have a full complement of streets within the urban compact but there does seem to be interest in having a mechanism in which the City can oversee the roadway and allow ATV/OHRV traffic. If the project moves forward there will definitely be a public input component to get feedback and support of our residents.

Is the proposal identified as a priority in a **local or regional plan** (e.g. local master plan, regional transportation plan, corridor study, etc). If **yes**, provide a link to the pertinent section of the plan(s):

Route 110, same NH Route 16, is identified in the City's Master Plan as a significant state & regional transportation corridor not only for Berlin but for the greater Androscoggin Valley. Route 110 is the City's primary east/west corridor, a major arterial, and in need of improvements related to increasing the Level of Service for the roadway as there are many driveways and roadways that enter the facility creating opportunities for conflict. Our Master Plan also references the fact that this stretch of road is part of a scenic byway. <https://www.berlinnh.gov/sites/berlinnh/files/uploads/transportation.pdf>

**Resiliency:** will the proposal address or improve natural hazard mitigation measures (e.g., flooding)?

- Drainage facilities within most of the project area were installed a long time ago. Since weather patterns and frequency and severity of storm events are changing, it is likely that the current facilities are inadequate (in both condition and size).
- This project is located along and is part of the Dead River watershed. Implementation of adequate roadway and secondary drainage systems will help mitigate and prevent flooding along this corridor.

## North Country Council - Ten Year Plan Project Proposal Form

Cost Estimate (enter 0 if not applicable)

Engineering:	\$415,000
Right-of-Way:	\$100,000
Construction:	\$4,150,000
Structures:	
Capital:	
Operating:	
Total:	\$4,665,000

What is the source of the above cost estimate?

Public Works Director, Eric Grenier, PE

Supporting Evidence and Documentation (Check box if available, then email or mail relevant excerpts/pages to NCC)

- |   |   |
|---|---|
| <input type="checkbox"/> Corridor Study (email excerpt)<br><input type="checkbox"/> Local Transportation Study/Plan (email excerpt)<br><input checked="" type="checkbox"/> Regional Planning Study/Plan (email excerpt)<br><input checked="" type="checkbox"/> Crash Reports<br><input checked="" type="checkbox"/> Turning Movement/Traffic Volume Data<br><input type="checkbox"/> Special Studies (Road Safety Audit, Warrant Analysis, etc.)<br><input type="checkbox"/> Ridership Estimates<br><input type="checkbox"/> Safe Routes To School Travel Plan<br><input type="checkbox"/> No Documentation Available<br><input checked="" type="checkbox"/> Other: Council Minutes | <input type="checkbox"/> Letter(s) of Support |
|---|---|

Attach a detailed map showing the proposal location and surroundings. Include the information listed below where there are potential impacts within or adjacent to the proposed project area. NCC is available to assist with mapping - please contact Alex Belensz ([abelensz@nccouncil.org](mailto:abelensz@nccouncil.org)) no later than **October 12th, 2018** if you would like assistance.

- |  |   |
|--|---|
| <input type="checkbox"/> Park/Recreation areas<br><input type="checkbox"/> Scenic/historic/cultural resources<br><input type="checkbox"/> Bike lanes/sidewalks/crosswalks<br><input type="checkbox"/> Recreational/multi-use trails<br><br><input type="checkbox"/> Transit service/public transportation routes<br><input type="checkbox"/> Park and Ride facilities<br><input type="checkbox"/> Culverts/bridges<br><input type="checkbox"/> Signalized intersections<br><input type="checkbox"/> Active railroads<br><br><input type="checkbox"/> Other active or proposed transportation improvements (please list): | <input type="checkbox"/> Water resources, aquifers, wetlands<br><input type="checkbox"/> Flood zones<br><input type="checkbox"/> Wildlife habitats<br><input type="checkbox"/> Commuter sheds<br><input type="checkbox"/> Freight corridors<br><br><input type="checkbox"/> Low income, minority, elderly housing<br><input type="checkbox"/> Retail/tourism destinations<br><input type="checkbox"/> Employment centers<br><input type="checkbox"/> Municipal services/schools |
|--|---|



# NH Route 110 Urban Compact Project

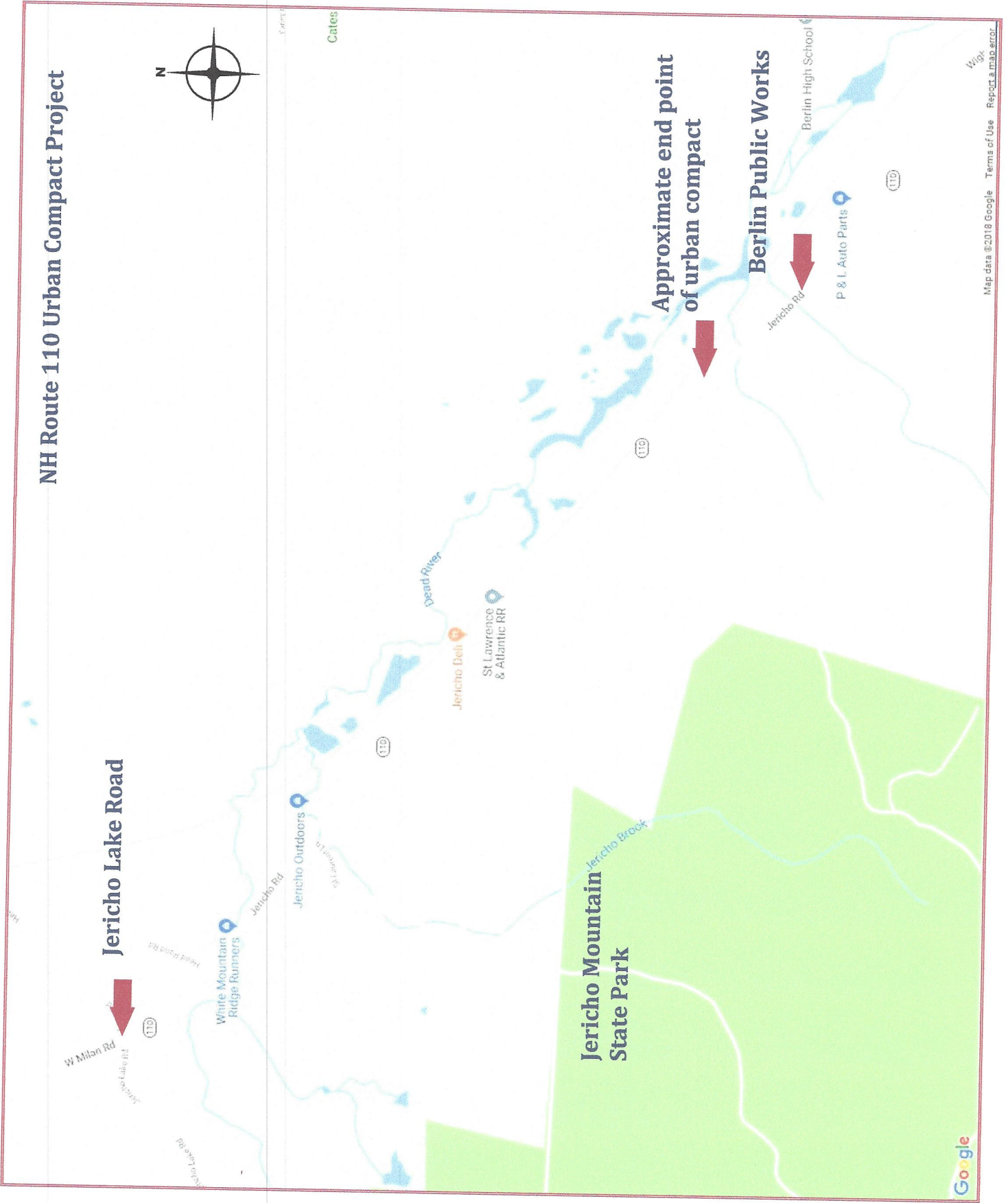
**Jericho Lake Road**



**Approximate end point  
of urban compact**

**Berlin Public Works**

**Jericho Mountain  
State Park**



A

	2013	2014	2015	2016	2017	TOTAL
Proposal One	29	32	24	25	24	134
Proposal Two	6	5	6	3	7	27

B

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRAFFIC

**Bureau of Planning, Traffic Section, Traffic Reports**

18-Feb-16

STAT.	TYPE	LOCATION	FC	2008	2009	2010	2011	2012	2013	2014	2015
Town: BERLIN											
045049	82	NH 110 (WIGHT ST) EAST OF SIXTH AVE (EB-WB) (81045082-81045083)	16	*	*	4400	*	*	3800	*	*
045050	82	WILLOW ST NORTH OF PINE ST	19	*	*	1900	*	*	1300	*	*
045051	62	NH 110 (WEST MILAN RD) AT MILAN TL (EB-WB) (61045012-61045013)	06	1600	1800	*	*	1600	*	*	1800
045052	62	NH 16 AT MILAN TL (SB-NB) (61045014-61045015)	06	*	2500	*	*	2600	*	*	2200
045053	82	NH 110 (BERLIN-GROVETON HWY) AT COMPACT LINE (EB-WB) (81045038-81045039)	16	*	2500	*	*	2100	*	*	2600
045054	82	NH 16 (MAIN ST) NORTH OF WOODWARD ST	16	*	*	4400	*	*	2900	*	*
045055	82	NH 110 (GREEN ST) WEST OF COLE ST	16	*	*	*	*	*	*	*	5000
045056	82	MASON ST EAST OF PLEASANT ST	17	5100	*	*	4800	*	*	4400	*
045058	82	GREEN ST BETWEEN NH 16 NB AND NH 16 SB	17	*	*	*	*	*	*	3400	*
045059	82	HIGH ST NORTH OF PLEASANT ST	17	*	2600	*	3000	*	*	2100	*
045060	81	NH 16 (PLEASANT ST) SB OVER DEAD RIVER	16	*	6100	*	*	5500	*	*	5300
045061	81	NH 16 (MAIN ST) NB OVER DEAD RIVER	16	*	5700	*	4800	*	*	4300	*
045062	82	SECOND AVE WEST OF WILLOW ST	17	5700	*	*	5000	*	*	3900	*
045063	82	MANNERING ST WEST OF SECOND AVE	16	*	*	*	*	*	*	2100	*
045064	82	NH 110 (MADIGAN ST) WEST OF 2ND AVE (EB-WB) (81045016-81045017)	16	*	2600	*	*	2200	*	2600	*
045065	82	HILLSIDE AVE WEST OF SPRING ST	17	*	*	*	*	*	*	*	2200
045066	82	UNITY ST NORTH OF MASON ST	17	*	*	6400	*	*	8500	*	*
045067	82	NH 16 (MAIN ST) NORTH OF 10TH ST	16	*	6900	*	*	6400	*	*	5200

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**City Council Work Session - excerpt  
November 5, 2018**

Present were: Mayor Grenier, Councilors Theberge, Remillard, Otis, Higbee, Gentili and Morgan Allain, Berthiaume and Rozek.

Others present: City Manager Jim Wheeler, City Clerk Shelli Fortier, Public Works Director Eric Grenier, Community Development Director Pamela Laflamme, Fire Chief John Lacasse, Code Enforcement Officer, Michel Salek, Finance Director, Patty Chase, members of the public and Barbara Tetreault, *Berlin Daily Sun*

**Route 16 portion of the NHDOT 10-Year Plan**

Community Development Director Pam Laflamme and Public Works Director Eric Grenier shared with the council a map with four boundary areas and suggestions for roadwork to be forwarded to North Country Council for the NHDOT 10-year plan. Since the reason for the Council choosing the Cleveland Bridge to Phase 1 of the Route 110 project as their first choice was to improve the entrance to the city, Eric Grenier and Laflamme felt that moving the boundary line to the town line should be considered. Eric Grenier advised that it would be his recommendation that Boundary Area #1, from the town line to Watson Street, and Boundary Area #2, from Watson Street to the Cleveland Bridge, could be to mill and overlay existing pavement, since the roadway surface is generally in good condition. However, Boundary Area #3 from Cleveland Bridge to the Y at Veteran's Park, and Boundary Area #4, from Veteran's Park to Green Square, should be a full depth reconstruction, as this was not part of the roadway reconstruction in the 1980's. Councilor Theberge asked about sidewalks, and Eric Grenier advised the sidewalk on the west side would be included. Mayor Grenier advised he would also like to see Pleasant Street from Veteran's Park to the US Post Office included as well. Councilor Rozek mentioned the condition of Hutchins Street and was advised this will need to be done within the next few years, before the 10-year plan would be available.

Councilor Rozek moved, with a second from Councilor Morgan-Allain to add the City Engineer's recommendations for Boundary Area #1 and Boundary Area #2, along with Pleasant Street from Veteran's Park to Exchange Street, to the Route 16 Project for the NHDOT 10-Year plan, which will be submitted to North Country Council for consideration. So moved, the motion carried.

Community Development Director Pam Laflamme also advised the Council that a vote of support was needed for the Route 110 Urban Compact Project.

Councilor Remillard moved, with a second from Councilor Rozek to show support for the Route 110 Urban Compact Project to Jericho Park. So moved. The motion carried with a vote of 8 for, and one opposed.



**City Council Work Session  
October 22, 2018**

Present were: Mayor Grenier, Councilors Otis, Higbee, Rozek, Gentili, Morgan Allain, and Th  berge.

Others present: City Manager Jim Wheeler, City Clerk Shelli Fortin, Public Works Director Eric Grenier, Robert Doyle, Barbara Tetreault, *Berlin Daily Sun*, and public; Claire Stiles, Stuart Light, Matthew Chernicki

Mayor Grenier opened the meeting at 6:30 p.m.

Mayor Grenier advised that a non-public session for legal matters and a non-meeting for collective bargaining would be needed after the agenda items.

**City Hall Elevator Study**

Robert Doyle summarized the elevator options from the City Hall Accessibility Study for the Council. Doyle reviewed the current accessibility, which includes the ramp out front, a platform lift in the basement, and the platform stair lift. The stair lift has malfunctioned in use and it is difficult to get parts for it due to its age. The manufacturer's recommendation for use is 20 years, and the lift was installed in 1988, so it is 30 years old. The platform lift is the same age and should also be replaced. The study provided cost comparisons for three options: the replacement of the existing platform and stair lift, the LULA elevator, and the 2100 lb hydraulic elevator. Doyle advised that after looking at several locations for the elevator, the best use and function would be in the central stair of the main hall. The structural system would not be impacted and the area would still be functional with a single stairway. The LULA (Limited Use Limited Access) elevator is smaller and slower, but provides a cost savings and would fit in the area of one of the stairways. The 2100 lb hydraulic elevator would be faster and potentially have a longer life, but is more expensive and would require more space. Doyle advised that both elevators are ADA compliant and meet building code. The current lift is not ADA compliant, but is grandfathered. Mayor Grenier expressed his concern about the historic value of the building and that changing the structure will cause it to lose character. Doyle assured the Council that the project could be done in a way that it would look like it was a part of the original building. The Council requested Doyle provide a computer generated image to show the building as it would look with the elevator installed. Councilor Theberge asked about emergency exit from the elevator in case of a power failure and was advised it would have a battery backup to allow the elevator to return to the ground floor in that event. Doyle advised that the maintenance costs would be less for the LULA than the 2100 lb hydraulic elevator. Mayor Grenier suggested that City Manager Wheeler look into grants that may be available to assist the city with the cost, such as the CDBG, or Rural Development. The Council asked Eric Grenier if the building's historic value would factor into the grant funding and E. Grenier advised it would depend on the funding source and may require an impact statement. Doyle advised that elevator installations have been done successfully in other historic buildings in the state.

**Ten-Year Plan Project Options**

The Council reviewed the options available for consideration by North Country Council for the NHDOT Ten-Year Plan. Pamela Laflamme sent a memo outlining the potential projects for consideration, which include the Route 110 Urban Compact Project, the Hutchins/Bridge Street Intersection, Cleveland Bridge to Phase I of Route 110, and Downtown in conjunction with the snowmelt feasibility study. Councilor Rozek also suggested that removing the defunct railroad tracks from Main Street, High Street, and Pleasant Street should also be considered. Councilor Rozek mentioned that it would be worth

contacting the railroad to see if they would give permission for the city to pull them up. Mayor Grenier advised that he would like to see option 3, Cleveland Bridge to Route 110, be considered, followed by Route 110. Councilor Higbee agreed, stating that Cleveland Bridge to Route 110 would finish off the main entrance to the city. Councilor Otis asked about bridges and City Manager Wheeler advised that is under a different program. Councilor Otis also suggested that the replacement of the box culvert on Coos Street be included in the capital plan.

Councilor Rozek moved to urge the City Manager to apply for the Cleveland Bridge to Phase I of Route 110 project, followed by the Route 110 Urban Compact Project; Councilor Higbee seconded and the motion carried.

Councilor Higbee advised he would advocate for the projects at the meeting of the North Country Transportation Commission.

#### **Other**

Public Works Director Eric Grenier advised that Bemis Street paving is done and that they will be working on the joints on the Mason Street bridge on Thursday. They will be starting after the morning traffic, around 9:00 am, and hope to be finished by the time school gets out. They will be shutting down the bridge and using equipment from Berlin Water Works to grind the pavement on each side of the bridge joints and then repave. Grenier advised the paving plants will be closing down on November 9, so this is a priority before winter plowing.

#### **Non-Public Session**

Councilor Rozek moved with a second from Councilor Morgan Allain to go into non-public session per RSA 91-A:3 II(i) Legal Matters. So moved, the motion carried unanimously by roll call.

The Council discussed legal matters.

Councilor Rozek moved with a second from Councilor Morgan Allain to come out of non-public session. All voted in favor.

Councilor Rozek moved with a second from Councilor Morgan Allain to seal the minutes until the City Manager determines they can be released. So moved, the motion carried.

#### **Non-meeting**

Councilor Higbee moved with a second from Councilor Morgan Allain to enter into a non-meeting per RSA 91-A:3 II (b) Collective Bargaining. All voted in favor.

Councilor Higbee moved with a second from Councilor Morgan Allain to end the non-meeting at 7:34 pm.

Councilor Rozek moved with a second from Councilor Higbee to adjourn the meeting at 7:34 pm. So moved, the motion carried.

Respectfully Submitted,  
Shelli Fortin  
City Clerk

## Jim Wheeler

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**From:** Michael Perreault  
**Sent:** Friday, February 16, 2018 1:49 PM  
**To:** Jim Wheeler  
**Subject:** Winter Maintenance Costs for Rte. 110 Urban Compact Change.

Jim,

Here is my estimate for the additional costs of winter maintenance for the additional 1.9 miles of Rte. 110.

**Rte.110 Urban Compact being move to Jericho Lake Road.  
1.9 miles of additional road is a 3% increase to existing  
responsibility.  
Additional Winter Maintenance Costs for additional 3%**

General Maint Labor	\$	7,850.00
Trades Labor	\$	1,350.00
Repair Materials	\$	900.00
Winter Overtime	\$	1,864.00
Salt	\$	5,400.00
Sand	\$	900.00
Fuel	\$	900.00
<b>Total</b>	<b>\$</b>	<b><u>19,164.00</u></b>

Thanks,

Michael P. Perreault

Public Works Director, City of Berlin, NH  
City Hall 168 Main Street Berlin, NH 03570  
phone: (603) 752-8551  
fax: (603) 752-8550  
[mperreault@berlinnh.gov](mailto:mperreault@berlinnh.gov)



# Pavement Deterioration Curve

