

March 7, 2016

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN**

CONFERENCE REPORT

PROJECT: Northern Pass
30% Plan Conference

DATE OF CONFERENCE: March 1, 2016

LOCATION OF CONFERENCE: 7 Hazen B34 211 Kancamagus Conf Rm

ATTENDED BY: DEPARTMENT OF TRANSPORTATION

William Cass – Assistant Commissioner
Dave Rodrigue – Director of Operations
Philip Beaulieu – Highway Maintenance District 1 Engineer
Douglas King – Highway Maintenance District 2 Engineer
Alan Hanscom – Highway Maintenance District 3 Engineer
Brian Desfosses – Highway Maintenance District 5 Assistant Engineer
James Hewitt – Highway Maintenance District 6 Utilities & Access Engineer
Chuck Schmidt – Administrator of Right-of-Way
Melodie Esterberg – Chief of Design Services
Matthew Powers – Utility Coordinator, Design Services
Lennart Suther – Utilities Engineer, Design Services

EVERSOURCE ENERGY

Jerry Fortier – NPT Project Manager, Eversource Energy
Kenneth Bowes – Eversource Energy
Lynn Farrington – Louis Berger
Stephanie Labbe – PAR Electric
Lance Clute – PAR Electric
Mark Hodgdon – Law Office Mark P. Hodgdon
Sam Johnson – Burns & McDonnell Engineering
Derrick Bradstreet – Burns & McDonnell Engineering
Jim Tighe – Quanta Services

SUBJECT: Site Evaluation Committee (SEC) Process Application and Design Update

NOTES ON CONFERENCE:

See attached Agenda

Representatives of the Eversource Energy Northern Pass Transmission project wanted clarification of their understanding of the Department's position/policy regarding the use of the Limited Access Right-of-Way (LAROW) as there have been several comments by the public asking about the use of such. Mr. Cass stated the Department policy is to discourage the use/disturbance of the LAROW and has testified this policy to Legislative committees in the

past. Eversource's understanding of the Department's position/policy is why they choose to locate their underground facilities within US 3. Eversource noted that there appears to be a misconception by the public that the proposed work within the LAROW would not create any additional disturbance, whereas any work would require disturbing additional areas. It was noted that additional disturbance area would be a problem along the Franconia Notch Parkway section of I-93 because the original Agreement, for construction, limits the areas that can be impacted. The Department was limited to working within the existing pavement on a recent guardrail improvement project. Another issue is that facilities in the LAROW require an exemption from Department policy approved by the Commissioner as well as the Federal Highway Administration. Mr. Rodrigue expressed appreciation for Eversource stating "their understanding of NHDOT policy to be " in any public statements regarding Department policies or procedures.

Eversource provided an update on the State and Federal permitting process. The SEC application filed on October 19, 2015 is being reviewed by the Committee with the 30 day pre-submittal and 45 day post-submittal Public Information sessions complete. The SEC 90 day Public Information sessions are scheduled for March 1, 7, 10, 14 and 16. The Department of Energy (DOE) EIS Public Comment Sessions are also scheduled in March on the 7, 9, 10 and 11 with joint sessions on the 7th and 10th. The DOE public comment period ends on April 4, 2016.

The following clarifications of the September 1, 2015 meeting minutes were provided:

- Eversource Energy attendee was Ovid Rochon – Burns & McDonnell (not Orid)
- Page 2, 5th Paragraph, middle of 1st Sentence should read: “. . . a change in the type of underground cable to XLPE in two 8” diameter PVC conduits, with three 2” PVC conduits for communication cables which allows . . .”
- Page 2, 5th Paragraph, 3rd Sentence: In reference to the “less than 2’ of cover” over the top of the splice vault/pit, the design team is working with the splice vault engineers to reduce the height of the vaults allowing for more cover. Further details will be provided during the design review process.
- Page 2, 5th Paragraph, 3rd Sentence: In reference to the “less than 2’ of cover” discussion, cover over the duct bank will be a minimum of 36” (not including the concrete cap) which should minimize any potential for frost heave. *(The Department requires the backfill material to be similar to the existing material to minimize differential movement by frost.)

Eversource indicated they intend to continue with the detailed design as survey, geotechnical and utility data is obtained and incorporated into the design drawings. They are currently obtaining record information from the various utilities. Eversource inquired as to the anticipated time for the Department's review of the design drawings to provide comments for both the SEC submittal and encroachment permit application. The time required is difficult to determine as it will depend on the scheduling of the submissions, level of information on the plans, the number drawings, and the work load of the Highway Maintenance District personnel. The primary focus of the detailed design will be the recently added 52 miles of underground construction as this is behind the original 8 miles of underground and the aerial crossings of State highways, which are at approximately 30% design stage. Eversource anticipates the additional 52 miles to be at 30% design stage by July 2016. It is anticipated that there will be some detailed design drawings available for review in June 2016.

Eversource was able to complete some geotechnical bores between Plymouth and Sugar Hill in November and December which included 44 shallow (approx. 15' deep – one per mile) and 9 deep (approx. 65' deep – critical HDD locations). Primarily no bedrock found in the shallow bores and bedrock between 19' – 45' in the deep bores. Eversource will share the results of their geotechnical investigation with the Department. The District Engineers had the following comments to improve the process:

- Need increased lead time before beginning work.
- Provide a plan of geotechnical boring locations and contact prior to beginning work.
- Should be a single point of contact because with multiple contractors there was some confusion when contractors were working adjacent to each other.
- Increase communication on schedule and when contractors will be on-site.

Eversource expressed interest in restarting the field work, survey and geotechnical borings in late March/early April. They plan to perform Class C survey of the entire 60 miles of underground construction and incorporate utility information into the survey. The survey limits were mentioned to be from the edge of Right-of-Way to edge of Right-of-Way. The Department recommends consideration of Quality Level “B” Subsurface Utility Engineering for utilities without surface features such as telephone, electric, gas and water with long distances between surface features. The Department has numerous experiences where the record information was incorrect by 5' – 10'. Eversource plans to complete approximately 240 additional shallow (every 1,000' to 2,000') and 100 additional deep (2 at each HDD location) geotechnical borings. Ms. Esterberg identified that for work to begin in late March/early April, the Highway Maintenance Districts will need to be provided a location plan and scope of work in the next couple of weeks. Mr. Beaulieu reminded Eversource of the Department's spring weight load restrictions.

In addition to the normal geotechnical information obtained from the borings the thermal properties of the soil is necessary for the cable design and warranty. The cable supplier is designing the cable and will be providing a warranty as well.

The Department anticipates Eversource will need to prepare a Traffic Management Plan considering the extent of work along significant State roadways which will require review through the Department's Traffic Control Committee.

Horizontally Directional Drilling (HDD) is expected to be a continuous operation from the drilling to the conduit installation. These locations will need to be reviewed to evaluate potential impacts to abutters. Eversource expressed that the work zone for traffic control during HDD operation to be the entire length; entry pit to exit pit. The Department is concerned with the layout length necessary to pull conduit through on some of the longer length operations. Whenever possible, Eversource should consider using adjacent property for drilling pits and layout of conduit to be pulled back.

Length of work zones will need to be evaluated on a case by case basis considering the traffic volumes, seasons, special activities, etc. Mr. Rodrigue reiterated that the Department still anticipates the facilities to be located outside the pavement as close to the ROW line as practical. He also added that construction activities within the right-of-way will not be allowed on Sundays, Holidays, Special Events, and peak travel times. Tourist traffic will need to be considered in the construction scheduling. No open excavations or drop-offs will be left overnight without protection. Mr. Beaulieu noted that plating is typically not allowed by the

Department. Excavations shall be either protected by barrier with appropriate delineation and end protection or filled in at the end of each work day and re-excavated the next day.

Communication and requests are to continue to be through Melodie Esterberg so the Executive Office has a single point of contact to obtain updates. Communication with the individual Highway Maintenance Districts should be copied to her.

It was suggested that separate issues meetings be held based on whether the construction alternatives are either underground or aerial so those individuals with only aerial concerns do not have to attend a meeting in which they have no interest.

Both Mr Hanscom and Mr. Beaulieu indicated they would be willing to field review specific structure locations but it would not be beneficial to drive the entire route until the design drawings are more complete.

The Northern Pass project schedule anticipates obtaining the permits in December 2016 with construction of aerial and underground facilities in 2017, 2018 and 2019. This is based on all design drawings to be at 30% by the middle of summer 2016. Eversource would like to continue update meetings and obtain comments to the proposed construction. The Department and Eversource will discuss acceptable dates and times for regular meetings.

Ms. Esterberg informed Eversource of the Department's concern with facilities over or under structures. Specifically Eversource has existing facilities over the I-393 bridges over Portsmouth Street in Concord. Eversource needs to look at alternatives so as to not place additional facilities over the existing structures and if possible to reduce them.

Mr. Rodrigue said the Department is looking forward to the design accelerating to the stage that field reviews can be conducted. He indicated that submitting segments for review would be better than submitting the entire package.

Mr. Rodrigue brought up the big legal issue for this project being the use of the prescriptive right-of-way which is being contested by the Society for the Protection of New Hampshire Forests. Mr. Bowes recommended that since this is a legal issue and in the court system that the issue not be discussed between the State and Eversource at these meetings. The legal issue can be discussed by the State's and Eversource's attorneys.

Submitted by:

Lennart Suther
Utilities Engineer

LDS/lds

NOTED BY: MAE, MCP

cc: Attendees, Richard Radwanski, Brian Schutt