

September 16, 2015

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

CONFERENCE REPORT

PROJECT: Northern Pass
30% Plan Conference

DATE OF CONFERENCE: September 1, 2015

LOCATION OF CONFERENCE: 7 Hazen B34 211 Kancamagus Conf Rm

ATTENDED BY: DEPARTMENT OF TRANSPORTATION

Dave Rodrigue – Director of Operations
Chris Waszczuk – Director of Project Development
Alan Hanscom – Highway Maintenance District 3 Engineer
Douglas King – Highway Maintenance District 2 Engineer
Chuck Schmidt – Administrator of Right-of-Way
Melodie Esterberg – Chief of Design Services
Lennart Suther – Utilities Engineer, Design Services

EVERSOURCE ENERGY

Jerry Fortier – NPT Project Manager, Eversource Energy
Michael Pillsbury – Louis Berger
John Kayser – Project Manager, Burns & McDonnell
Orid Rochon – Burns & McDonnell
Mark Hodgdon – Law Office Mark P. Hodgdon

SUBJECT: SEC Process Application and 30% Plan Review

NOTES ON CONFERENCE:

Representatives of the Eversource Energy Northern Pass Transmission project met with NHDOT to review the current plans with the objective to provide a “complete application” to begin the New Hampshire Site Evaluation Committee (SEC) process to obtain a “Certificate of Site and Facility” permit. The emphasis of this meeting was on the installation of underground facilities within the road right-of-ways of US 3, US 302, NH 18, NH 116 & NH 112 which includes a new 52 mile underground proposed route primarily in Districts 1 & 3 from Bethlehem to Bridgewater. The SEC process is part of the larger federal and state permit process which includes a Presidential Permit from the Department of Energy, Army Corps of Engineers, Secretary of the US Department of Agriculture in order to cross the White Mountain National Forest, and Federal Energy Regulatory Commission.

Since the last meeting in March of 2015 the Department of Energy (DOE) Draft Environmental Impact Statement (EIS) has been issued which generated the additional 52 miles of underground construction. There is a 90 day comment period with an anticipated 5 public informational meetings over the next 2 weeks to obtain comments. Then Final Environmental Impact Statement will be filed with 3 public review windows before Presidential Permit Record of Decision is issued. Anticipate that the Record of Decision will not be issued until after the NH SEC process is completed.

Current schedule anticipates construction of aerial and underground facilities in both 2017 and 2018 with some final restoration of the surface in the spring of 2019. This is somewhat dependent on the number of construction crews. The Department informed Eversource that it is anticipated that there will be inspection charges because of the extent of work on this project.

The recent plans provided a couple days ago of the underground portions were separated by geographical areas. The Department will need the segments separated by Highway Maintenance District, Town and Road segment with the addition of labeling the Town on each sheet. Also the labels for the right-of-way should be changed to "ROW" not "R/W" and the edge of pavement to "Edge of Pavement" not "Edge of Road". No underground facilities are within the Interstate system.

It is anticipated that the Department would issue a Use and Occupancy Agreement for the entire project with individual excavation permits from each Highway Maintenance District office for individual locations/segments. Temporary construction access points from the right-of-way into Eversource property or easements are to be separate driveway permit applications.

Eversource informed the Department of a change in the type of underground cable to XLME in two 4" conduits which allows longer distances between splice vaults and pits. Splice vaults and pits will be 10' x 30' x 6' deep precast concrete and are anticipated to be spaced 1,800' to 2,300' apart. The Department expressed two concerns with the splice vaults and pits relative to the proposed location of the conduit adjacent to the pavement and the limited (less than 2') cover over the structure. With the conduit adjacent to the pavement the excavation for the splice vaults and pits appears to impact the existing pavement and would require one-lane, alternating two-way traffic during construction and reconstruction of the roadway structure. A concern with the limited cover over the structure will be adjacent roadway heaving during the winter due to dissimilar soil materials. There will need to be further conversations regarding the pavement restoration during and after construction. The Department would not want only half the roadway restored.

Eversource indicated that the locating the conduit further from the edge of pavement creates additional environmental issues such as wetland impacts, tree removals, etc. and is trying to balance these with the roadway impacts. The Department commented that directional drilling under wetlands and trees has been done by other utilities on smaller projects to avoid those impacts.

The Department commented that Eversource should be aware of and show on the plans the existing utilities and other facilities within the right-of-way. Also the use of Subsurface Utility Engineering to determine the location of existing utilities was recommended.

The Department asked whether there was any consideration of installing the splice pits and vaults outside of the right-of-way? Eversource indicated that the acquisition of the rights would be difficult and any resistance would require redesign of the adjacent alignment.

The Department anticipates a detailed traffic control plan with a submittal through the Department's Traffic Control Committee. And probably should anticipate a Traffic Management Plan considering the extent of work along significant State roadways.

The allowable construction season within the NHDOT right-of-way would be April 1st through November 30th with consideration of the weather. Restrictions as to the time of day, days of the week, etc. would depend on the roadway segment, the traffic volumes and any special activities in the area.

Design and construction will be required to follow the Utility Accommodations Manual when within the NHDOT right-of-way. Note that there is a requirement to have 5 feet of cover under secondary roads and 10 feet of cover under primary and freeway roadways when installed by horizontal directional drilling. The Department would prefer that no electric facilities be located on bridges due to concerns with bridge maintenance adjacent to high voltage electric current. The contractor will need to be aware of the clear zone requirements from the edge of pavement with equipment, materials and workers vehicles.

The Department reminded Eversource that there are segments (large amount) of US 3 that contain a concrete slab under the asphalt pavement. Eversource will need to provide details of construction adjacent to and any impacts to the concrete slab.

Construction within Plymouth is a concern with the number of utilities and other underground facilities such as water, sewer, storm drainage, communications, electric, and the University's communications facilities.

Eversource anticipates limited maintenance activity, being the failure of the cable which could involve exposing conduit. This type of cable has been in use since the 1990's with limited failures.

The bond amount will need further discussion. The major concern is with the restoration of the pavement. The Department would not be concerned with bonding the construction of the cable installation.

As far as any NHDOT projects planned along the route it was suggested that Eversource review the Department's Draft 10 Year Plan available on the NHDOT website.

Eversource and its contractors and supplier are expected to follow the Department's requirements for size (heights and widths) and weight. Oversize and overweight moves are

required to be done during the day, while super moves are usually required to occur on the weekends at night.

Submitted by:

Lennart Suther
Utilities Engineer

LDS/lds

NOTED BY: MAE,

cc: Attendees, Philip Beaulieu, Richard Radwanski, Brian Schutt

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