Comment on DE 2015-06 Northern Pass

Letter to DOT regarding NPT burial specs, sent January 3, 2017:

"DOT people in charge of NPT application,
I have in hand the HDD Good Practices Guidelines, which DOT references in their Utility Accommodation Manual, which confirms DOE and New England Clean Power Link statements about the width required for HDD:

"For large river crossings, **the pipe layout area and exit area should be at least 12m (40ft.) wide and as long as the pipe, plus 15 to 60m (50-200ft.) The entry side work area should be 45-75m (150-250 ft.) wide and 15-45m (50-150ft.)** long, as shown in Figure 5-1. Irregular-shaped or smaller work areas can usually be accommodated, **within reason**, by using off-site storage of spare parts and other non-essential items." (my emphasis)

Being larger than 16', NPT fits into the large classification. And with two 18+" bores, what happens? One drilled at a time, perhaps doubling construction time?

Figure 5-1 shows a work space 80-180' wide and 150-250' long. Presumably the pipe layout area and exit area is another area, not shown.

Also mentioned is the need to consider the turning radius of emergency vehicles, the location of schools, hospitals and other public buildings in area that require uninterrupted access and alternative routes (I saw none on the specs. except in Franconia center.)

Minimum passing lane width is shown at 11', yet requirements for fire fighting equipment are typically wider:

"Width. The minimum unobstructed width of a fire lane shall be not less than twenty-four feet (24'). This is required for two fire trucks to pass in case of an emergency.
Turning Radius. All fire lanes shall have at least a thirty foot (30') inside turning radius and at least a fifty-four foot (54') outside turning radius."

http://www.arlington-tx.gov/fire/wp-content/uploads/sites/10/2014/07/Fire-Lane-requirements.pdf

There is interesting information about inadvertent returns of drilling fluid to the surface (they don't much care about what goes underground) and one of the causes of returns is voids in the soil, one of the existing conditions mentioned in DOT/NPT meeting minutes as a cause of the poor heat dissipating qualities in the soils under the road.

spare parts and other non-essential items. Clearing and excavation are typically accomplished using dozers, trackhoes, and end loaders, appropriately sized for the specific project.

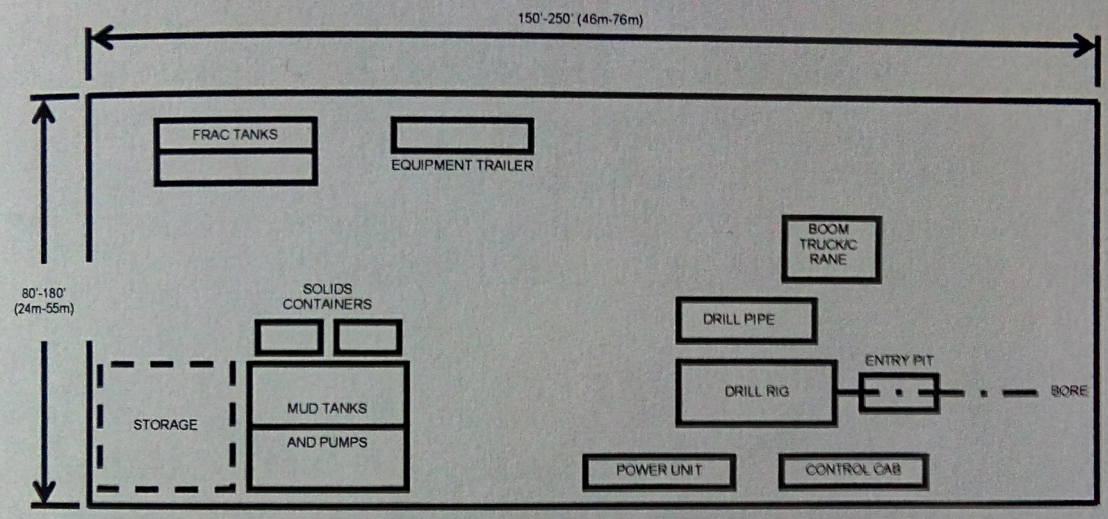

Figure 5-1: Typical Rig Side Work Area and Equipment Lay-Out for Large HDD Projects

Work area above: 80’-180’ x 150’-250’

Also mentioned: ***"The National Historic Preservation Act defines the criteria used to identify historical and cultural resources for inclusion in the National Register of Historic Places. Sites eligible for that status can have no negative impact from construction activities."*** The Dow Academy and Abbie Greenleaf Library, in Franconia are listed to the National Register, and other NR and potentially NR properties on the route certainly exist, but no information has been provided on these, or blasting locations. I see no communication between NHDHR, DES, DOE (NEPA and Section 106) and DOT on the myriad issues involved in burial. For example, geotechnical boring revealed hydrocarbon contamination at several locations, indicating pollution plumes. Nothing in the specs indicates these areas and how the applicant plans to "mitgate" rather than increase the pollution, during proposed construction. DOT classifies road side soils as mildly contaminated, but nothing in the specs. shows any attempt to address this. There are references to DES requirements on the specs., but having seen the "silt fences" for

the geotechnical boring and the Eversource work in Deerfield, I suspect this is window dressing.

NPT specs showing typical lane closure for Longitudinal trench/splice enclosure installation are not-to-scale so width requirements for the majority of the route are unknown.

DOT comments to NPT in April 2016 state: "Survey Notes #7 identifies the ROW as approximate. As noted above the ROW needs to be accurate in order to approve location of the proposed facility." October 26, 2016 meeting minutes (NPT & DOT) state that "the field survey work is complete", yet the easement widths are not shown correctly, nor is any documentation presented in support of what is shown. Meeting minutes also state "The Department is not evaluating the merits of the project but is ensuring Eversource is following the policies and procedures for facilities within the right-of-way." Yet, DOT has not required the applicant to correctly show the right-of-way and work within it, surely what should have been the first step in this process. Latest specs. state that "the order of accuracy of the control survey is second order, Class II"; clearly not good enough.

The lack of a scale not-pegged to the document size in the NPT road documents is a serious problem. Intervenors had until 12/30/16 to respond to the latest burial specs with their pre-filed testimony to the SEC, and the implication is that DOT has accepted them, yet clearly the conversation between NPT and DOT is not finished, which leaves this aspect of the SEC process in confusion.

These specs are not close to finalized, and it would help if DOT would clarify this situation with the SEC and intervenors. We can hardly have a plan-as-you-go project up for approval by the SEC, which is where we stand now.

Lastly, the HDD manual was last updated 2008. Given the rapid developments of, and experimentation with, new HDD technology, DOT should at least reference some up-to-date supplements. Any contractor will be using methods developed since 2008, and these need to be addressed.

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