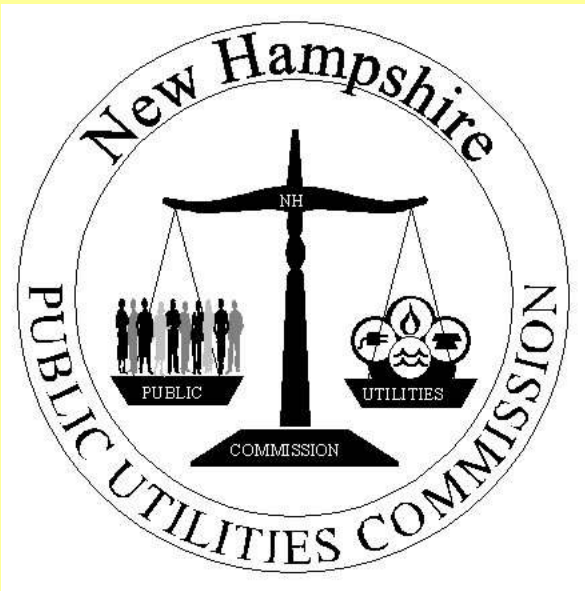
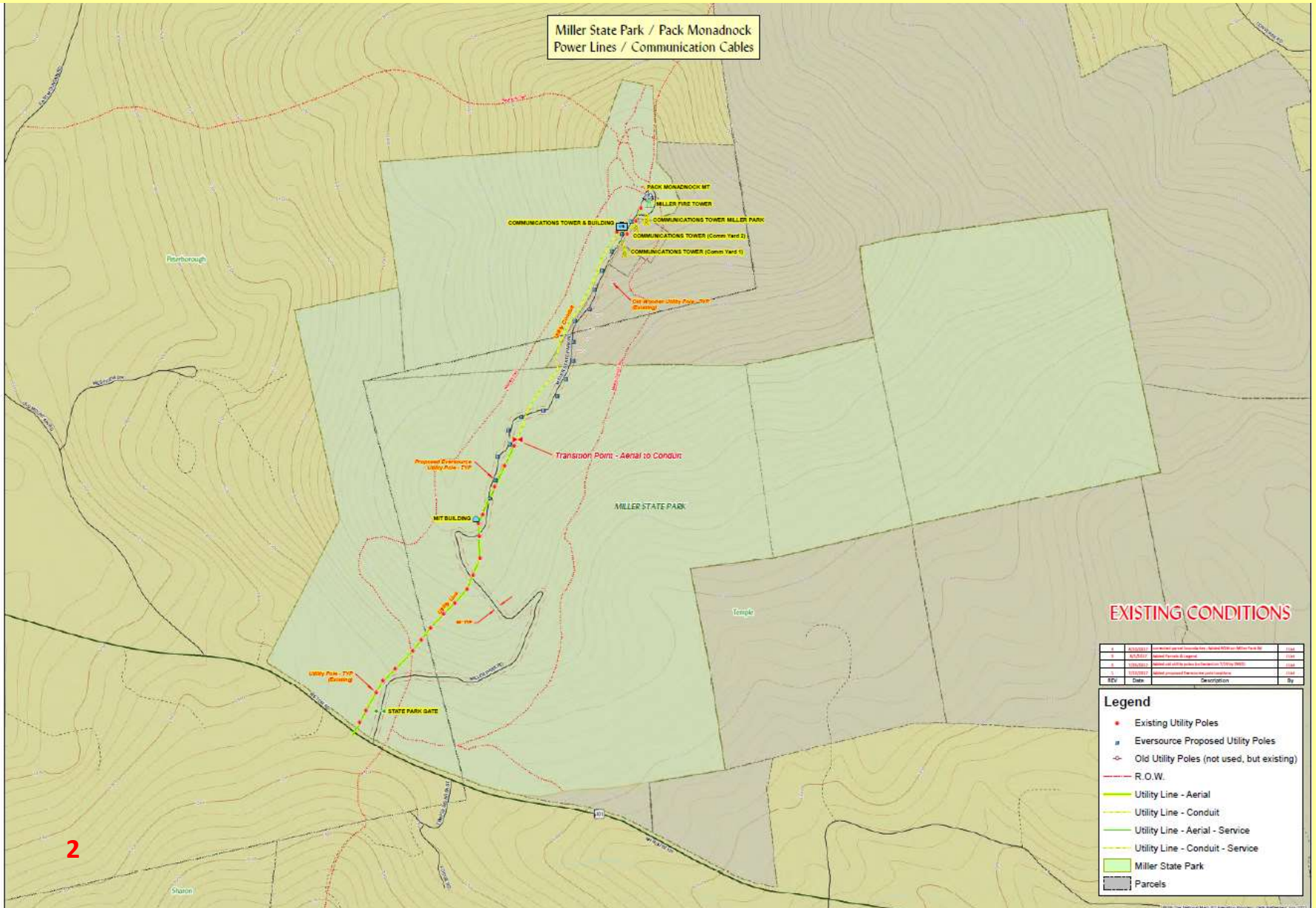


“Miller State Park Network Infrastructure Project”

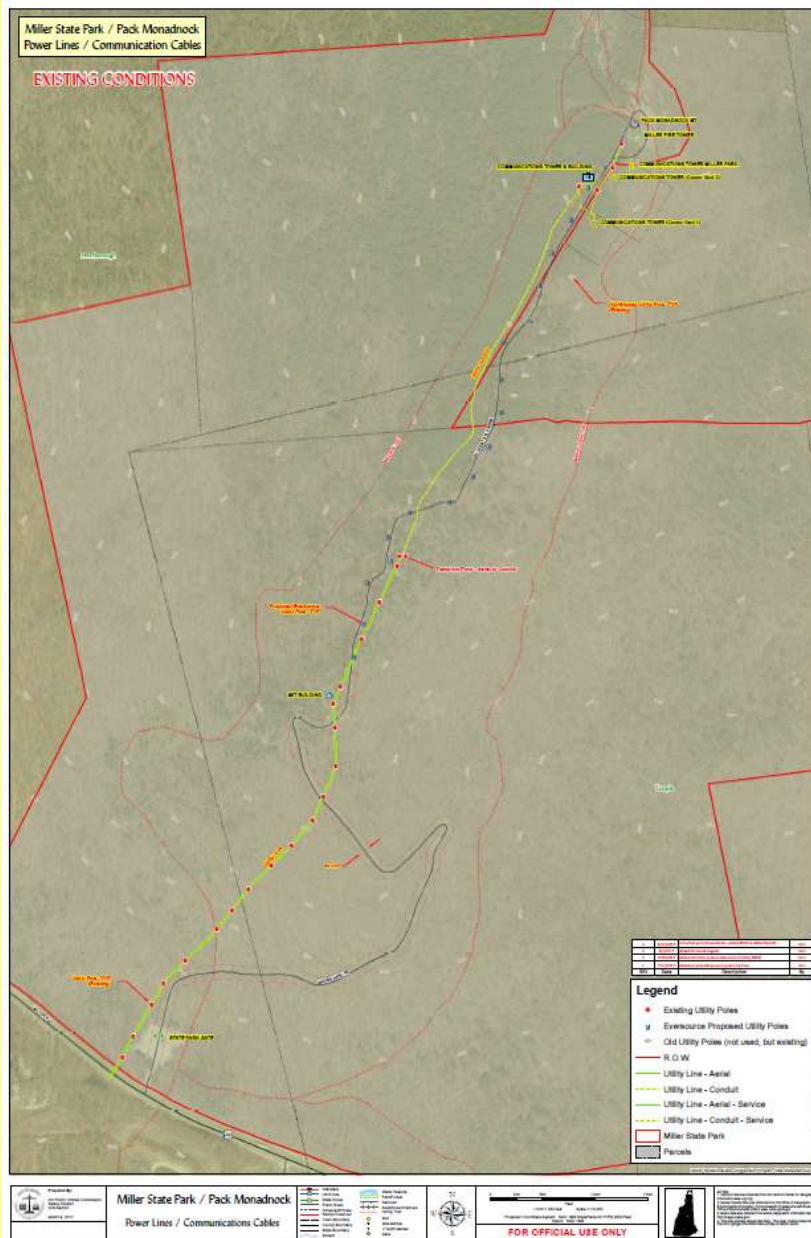


Randy Knepper
New Hampshire Public Utilities
Commission
Shieling Forest, Peterborough
Oct 12, 2017

Miller State Park/Pack Monadnock



Miller State Park/Pack Monadnock



Overview

- 2 Towns: Peterborough and Temple
- Existing Route Starts in Peterborough, enters Temple and re-enters Peterborough
- Existing Service Road considered a Class 2 Highway originally designated by 110 year old law
- Utilities installed in a patchwork manner by predecessor companies over a period of time spanning decades

Why are we here?



PUC Involvement


2 Statutes (Paraphrased)

- **All State lands** (outside of NH DOT ROWs) and state waters (public) require licensing (**permission**) for the placement and location of public utility facilities either above ground, on the ground or below ground. The PUC is the agency charged with oversight. *ref. RSA 371:17*
- Every public utility shall furnish such service and facilities as shall be reasonably **safe** and **adequate** and in all other respects just and reasonable. *ref. RSA 371:1*

Project Goals

- *1. Assemble team of stakeholders: utilities, state agencies, end use customers to propose and review alternatives and recommend coordinated solutions.*
- *2. Determine least amount of impacts for users of MSP,
 - Determine shortest project duration
 - balanced against estimated cost schedules*
- *3. Public Outreach through website, public forums, and notices to be handed out at Miller State Park to gather public input that may not have previously considered and provide information regarding the project to date*
- *4. Finalize legal considerations, construction, operational and maintenance considerations and finalize cost estimates.*

Alternatives Considered

- Alternative # 1 : Do Nothing, Leave as Is
- Alternative # 2 : Underground from Base to Summit
- Alternative # 3 : Underground from Existing Poles to Summit
- Alternative # 4 : Underground within pavement along the road
- Alternative # 5 : Replace All existing poles with new poles
- Alternative # 6 : Replace conduit from MIT Building to Summit with New Poles and slight modification to existing poles
(Recommended) 

Alternative #1 Do Nothing

Pros

- **No Cost Impact**
- **No Temporary or Permanent Impact to MSP**

Not a practical alternative!!

Cons

- **Does not address improper locations of existing utilities (illegal)**
- **Creates liability for State as public hazard is not remediated (illegal)**
- **Does not fixing licensing issues**
- **Does not address safety code issues**
- **Does not allow new fiber to be installed**

Alternative #2 Underground Base to Summit (same location)

Pros

- **Once installed less visual impact**

Not a practical alternative!!

Cons

- **Would require large swaths of blasting**
- **Significant negative impact during construction**
- **Permanent scar upon Pack Monadnock**
- **Difficult to maintain if an outage occurred**
- **Does not address location issues**
- **Same proximity to existing trails**
- **Extremely Cost Intensive (10 to 15 X)**

Alternative #3 Underground from existing poles to summit (same location)

Pros

- **Once installed less visual impact**
- **Removes safety hazard from public**

Not a practical alternative!!

Cons

- **Would require large swaths of blasting**
- **Significant negative impact during construction**
- **Permanent scar upon Pack Monadnock**
- **Difficult to maintain if an outage occurred**
- **Does not address location issues**
- **Same proximity to existing trails**
- **Still requires alterations to existing poles**
- **Extremely Cost Intensive (10 to 15 X)**

Alternative #4 Underground Base to Summit (in pavement of ROW)

Pros

- **Once installed less visual impact**
- **Does address location issues**

Not a practical alternative!!

Cons

- Existing Road not built to current DOT standards so sub base of ROAD is ledge
- Significant negative impact during construction
- Existing hairpin turns not conducive to conduit pulls – need gradual radius
- Difficult to maintain if an outage occurred
- Future impact to vehicle travel on road when servicing
- 30% increase in length of project
- Extremely Cost Intensive (15 to 20 X)

Alternative #5 Replace all poles to Summit (in DOT ROW)

Pros

- Once installed less visual impact of “Best Views”
- Does address location issues
- Does address Safety Hazards
- Easier future maintenance if an outage occurred

Cons

- Unnecessarily replaces existing poles that do not need replacement
- Lengthens duration of project to more than a year
- Expands cost of the project by approx 40%

Alternative #6 Replace Conduit and relocate to Overhead in DOT ROW)

Pros

- Once installed less visual impact of “Best Views”
- Does address location issue of Nature Conservancy
- Shortest schedule duration
- Does address Safety Hazards
- Easier future maintenance if an outage occurred
- Replaces only existing poles that are necessary
- Least amount of holes being installed in Pack Monadnock
- Reduces costs to lowest levels although still significant
- **Acts as a good compromise to Alternative #5**

Cons

- **Still may require off road vehicle for lower portion**

Recommended Solution

Project Expectations

- Expected project duration is mid to late November 2017 through November 2018
- Major Activities:
 - Tree Trimming
 - Pole Setting
 - Overhead Electric Conductor Installation
 - Overhead Equipment Installation,
 - Fiber Attachment to Poles
 - Telecommunication and Data Attachment to Poles
 - End Use Customer connections
 - Final removal of abandoned utilities