

7-13-2016 NEW HAMPSHIRE PASSENGER TRAMWAY SAFETY BOARD MEETING MINUTES

Present:	Members:	Stanley Judge
		Selden Hannah
		Bob Hoyt
	NH DOS	Nancy Ettelson
		Briggs Lockwood
	Skytrans	John Pendleton
		Rich Combs
		Carl Beverly
	Waterville Valley	Ryan Frost
		Barry St. Cyr
		Wallace Weaver
	Sky Trac	Maynard Russell
		Beth LaPointe
	Mittersill	Ted Sutton
	Attitash/Wildcat	Brian Heon
	Pat's Peak	Kris Blomback
	National Forest	Chris Hanrahan

Selden called the meeting to order at 9:00.

The Board reviewed the minutes from the 6-16-2016 meeting.

Motion to accept: Stan Judge.

Second: Bob Hoyt.

Selden pointed out a few changes; the Board agreed with the changes.

Approved unanimously.

The Board reviewed the Mittersill T-Bar application that had been tabled at the June meeting. The Board reviewed the submittals, and a response letter from Sky Trac. It appears that the equipment drawings are not included in the submittals. Stan pointed out that the concrete plans that have been submitted call for 4,000 pounds per square foot soil bearing pressure, and asked if anyone had done a determination that this exists. Evidently no formal evaluation has been done. Selden asked if any structures are pinned to ledge. Maynard Russell explained that the top terminal is a gravity footing and grouted pins are used to resist sliding. All structures have a 1.6 factor of safety for overturning without pins, though some towers also are pinned. Selden asked who reviewed the vertical clearances. Maynard replied that they were reviewed by LST, and also by the design engineer for this project, Ross Palmer of Sky Track.

Stan asked if there are specs for the grout and/or for the installation procedures. Basic grout guidelines were found in the submittals. There was some discussion about grout/terminal foundation failures on chairlifts, and likely causes and ongoing concerns – not specifically for this installation. Stan suggested that proof-testing of anchors in ledge is important. Selden pointed out that proof testing is an ok determination for that point in time, but might not be a reliable indicator over time. Selden suggested that the grout for this project be specified.

Motion to approve the application – concrete only – : Bob Hoyt.

Second: Stan Judge.

Selden pointed out that drawing 0214, 0215, revisions showing footings pinned to ledge, are not stamped, and will need to be included on the stamped drawing list.

Approved unanimously.

Selden asked that if there is any additional discussion regarding grout/terminal footing failures, now would be the appropriate time to talk about that. Selden directed the inspectors to review all lifts in New Hampshire and identify all terminals that are pinned to ledge; further, the factor of safety for overturning will be reviewed. The intention is to use this data in formulating a plan as assurance that terminal footings continue to perform as designed.

The Board reviewed an application for construction from Waterville Valley for relocation of the World Cup Triple chairlift to a new location on Green Peak.

Rich Combs from Skytrans presented the application. Rich explained that the terminals will not be pinned to rock. Any towers that are pinned will have full specifications on grout. Selden asked what was the original age of the lift. Rich replied that the original lift is a Stadel chairlift from 1985, and that the drive terminal was replaced by Doppelmayr in 2000, following a fire. The haul rope has been subject to Magnetic Wire Rope Testing, and passed, and a section will be sent for break testing. A new section of rope will be added to the lift, as this lift line is longer than the original.

Selden asked about whether the lift will need upgrading to meet current standards. Rich indicated that Skytrans continues to assess the lift and the 2011 standard as it applies. It appears that there will be some upgrading required in the drive, though at this point Waterville Valley is asking only for approval for concrete construction. Rich explained that the tower foundations will be designed with a 1.5 factor of safety minimum.

Nancy Ettelson asked about rebuilding. Rich explained that they will be doing thorough inspections of all wear items. Nancy asked about rigging/lifting apparatus, which is required. There was some discussion. Rich assured the Board that proper attachment points for fall protection will be provided, as required.

Nancy asked if the sheave assemblies will be rebuilt. Rich explained that they will be inspected and rebuilt as necessary.

John Pendleton from Skytrans explained the tower loadings that exist with the current lift were reviewed, and that they have done tower loading analysis consistent with the requirements in the B.77.1 2011.

Nancy asked about NDT on the chairs. Rich explained that all chairs will be disassembled and re-galvanized, and will all undergo NDT.

Selden asked about the line calculations for partial loadings. John Pendleton explained that they ran numbers for empty chairs for the middle section of the lift at 1.5X tension. Rich pointed out that the submittals contain eight loading scenarios to verify tower loading that is compliant.

Motion for approval – concrete only -: Stan Judge.

Second: Bob Hoyt.

Rich pointed out that they were hoping to have the low voltage upgrade approved also at this time.

The Board reviewed the submittals for that. Carl Beverly from Skytrans went over the submittals with the Board. The submittals were not detailed as to the actual wiring, but did show the control layout. Carl indicated that this is a 'relay based' system with no processor, and is a replacement for the existing system.

The motion was amended to include approval of the low voltage system as well as the concrete.

Approved unanimously.

The Board discussed the 'Kid Stop' letter that is being drafted by Mark Petrozzi. Selden has sent some comments directly to Mark, and Briggs agreed to pass on some comments from Stan.

The Board set the date for the next meeting for Wednesday, August 17, 2016, at 9:00 AM, at the Division of Fire Safety.

Motion to adjourn: Stan Judge.

Second: Bob Hoyt.

Approved unanimously.

Respectfully Submitted,

W. Briggs Lockwood