### SECTION 20. BLASTING:

Blasting is anticipated for some foundations and road cut slopes. Generally, soils are deep for a ski mountain, fifteen feet or more to bedrock in most locations. However, deeper cuts are proposed in some locations and blasting is anticipated to limit the amount of disturbance required by allowing near vertical slopes.

All permits will be applied for prior to the commencement of any blasting activity. Regardless of the location of any blasting on the project site; ground vibrations will not exceed limits in USBM RI 8507, Appendix B, Figure B-1, and air blast will meet Department rules 375.10(C) (4) (c) and the Bureau of Mines Section 390Z (14L). Further, it is acknowledged that flyrock must remain on the project site and will not enter natural resource zones unless it is in an area that has been specifically approved by the Maine DEP. Any blasting needed to deal with glacial erratics or ledge will conform to State and Federal Regulations on Blasting procedures and Town notification, and will be recorded per Section 38 MRSA 490 ZL, for a period not to exceed three years.

A typical blasting plan is included with this section. Prior to construction, the blasting company will be required to submit the final blasting plan to the Applicant.

# Sugarloaf Mountain Corp. Snowmaking Booster Pumphouse - Blasting Procedure Feb. 7, 2020

## Introduction

Construction contractors and subcontractors working on site must comply with all federal, state and local regulations when conducting a blast. Blasting contractors must be qualified, licensed and insured. Only qualified persons may handle explosives. Notice must be provided to Sugarloaf's VP of Operations prior to any blasting activity

### **Pre-Blast Survey**

No buildings exist within 2,000 ft. of the project site which are not owned by Sugarloaf. One drilled bedrock well exists approx. 250 ft. north of the project site, which is owned by Sugarloaf.

### **Performance Standards**

Blasting contractors must meet the following performance standards at a minimum:

- 1. Blasting may only be conducted between sunrise and sundown or between 7:00 AM and 7:00 PM, whichever is lesser. See 38 MRSA §490-Z(14)(G)
- 2. Ground vibration at offsite structures not owned or controlled by the developer may not exceed the limits shown in Figure B-1 of Appendix B, U.S. Bureau of Mines Report of Investigations 8507
- 3. Air overpressure offsite may not exceed the limits provided at 38 MRSA §490-Z(14)(H)
- 4. Flyrock must be controlled so as to remain on the site and may not enter a protected resource unless the Department has previously approved alteration of that resource in the impacted area
- 5. Records of blasts generally consistent with the requirements of 38 MRSA §490-Z(14)(L) must be kept for at least one year from the date of the last blast and provided to the Department if requested (note that the Department generally does not consider such records incomplete if the social security number of the blaster is not included). Copies of blast records must be provided to Sugarloaf following each blasting event.

#### **Blasting Plan and Procedure**

The blaster-in-charge should assemble all blast crew personnel and any appropriate Sugarloaf and site personnel to conduct a brief review of the blast area security plan. The blast area is the area in which the concussion (shock wave), flying material, or gasses from an explosion may cause injury to persons. This plan should outline the following:

#### Cover:

• Identify the qualified and licensed blaster or shot firer who will detonate the blast

- Specify the communication method to acknowledge the shot is loaded and ready to detonate
- Identify the anticipated direction of rock movement
- Specify the type of cover used to prevent flying material from leaving the project site
- Specify the shot firer location, including distance and direction from blast and type of protective shelter to be used by the shot firer

# Clearing:

- Specify the limits of the blast area
- Assign qualified personnel to clear the blast area. All personnel should be familiar with the project site
- Specify the communication method to acknowledge that the blast area has been cleared
- The shot firer is the only person allowed in the blast area after it has been cleared
- If possible, employ continuous observation of the blast site from a substantial distance beyond the blast area. Specify method for monitor to communicate with shot firer

# Guarding:

- Identify potential routes of entry to the blast area
- Assign qualified personnel to guard routes of entry to prevent persons from entering the blast area after it has been cleared
- Specify method of communication for guards to communicate with the shot firer
- Outline the authority of the guards to terminate the blast at any time in the event of a blast area security breach
- Before retiring to shelter location, the shot firer should observe the blast area after it has been cleared and guarded to witness that no persons remain in harm's way

# Signaling:

- Review the type, duration and interval of blasting signals:
  - $\circ$  5 minutes to detonation: 3 long horn signals
  - 1 minute to detonation: 3 short horn signals
  - All clear: 1 long horn signal

Emergency Plan:

• Outline emergency plan in the event of an injury as a result of blasting Misfire:

- Specify communication method for shot firer to communicate with all other personnel in the event of a misfire
- Outline misfire procedure