

**MEETING MINUTES**  
**ELM STREET ROCK SLIDE, PROGRESS MEETING NO. 8**  
**conducted at the site trailer on Elm Street, Montpelier, VT**  
**Tuesday, March 7, 2006**  
**10:00 a.m. - 11:00 a.m.**

**Attendance:**

Tom McArdle, City of  
Montpelier

David Marcoux – [Janod Contractors](#)

Steven Millard, Golder  
Associates Inc.

Jay Smerekanicz – Golder Associates Inc.

*(VTrans not able to attend due to state holiday.)*

**Topics of Discussion:**

1. Weather:
  - Janod had down time due to weather issues last week (wind chill and heavy snow). The forecast for the next few days predicts relatively warm conditions, without to much precipitation.
2. Grout Cube Testing:
  - Janod conducted another round of anchor grouting on Monday (March 6, 2006). Golder collected grout cubes of representative samples of the grout for testing by the VTrans laboratory. Golder requested the cubes be tested for breaks at 5-, 7- and 28-days (the VTrans laboratory technician is on vacation, and the 3-day break cannot be met).
3. Drilling:
  - On Thursday, March 2, 2006, Golder marked out additional rock dowel drilling locations below the shotcrete wall in Area 4A, and Janod started drilling these locations using two wagon drills this week. Winter conditions are still affecting drilling progress, e.g., causing freezing of feed control mechanisms. Janod is blowing the air systems several times a day and at the end of each day to remove condensed water in the systems. The 900 cubic feet per minute (cfm) and 375 cfm air compressors are running well.
4. Sidewalk on northwest side of Elm Street:
  - Scaling by the Dubois Cat 325 excavator is scheduled to resume either late this week or early next week in the lower parts of Areas 4A and 4B.
  - Due to the high pedestrian traffic volume on Elm Street, the City cannot permanently close the sidewalk on the northwest side of Elm Street. Janod and Golder stated that there will likely be a continuing raveling issue impacting pedestrian traffic after scaling is complete, and there will likely be a need to prevent minor rock falls in the lower parts of Areas 4A and 4B.
  - There is at least one relatively thick, steeply inclined sandstone slab (about 2-3 ft thick), with an upper open joint, located at the base of the slope. This area is currently buried by slushing debris. Stabilization of the slab will likely be necessary, and may consist of spot rock dowels and a concrete buttress. Removal of the slab may impact overall slope stability; therefore the final slope grade will

likely have little to no room for minor rockfalls to land outside the sidewalk, i.e., rock falls will likely reach the sidewalk. Several stabilization options may exist, including construction of a wall or installation of a drape mesh. The City requested Janod and Golder review the potential stabilization options for this area.

5. Scaling:

- The slusher was removed from the site on Saturday (March 4, 2006).
- Hand scaling, including the use of the blowpipe, is still needed in Areas 2, 4A and 4B.

6. Drilling Dust:

- The drilling operation is producing dust. Depending on the wind direction, some houses on Cliff Street may be impacted by the dust, and may require cleaning.
- Janod can add a water mist to the compressed air used by the drills, but this requires the air temperature consistently stays above freezing, and requires separate header/manifold equipment. In addition, the misting system is more efficient with down-the-hole drills when a high pressure system is used (250 psi). The two compressors on site are low pressure (125 psi).

7. Cliff Street:

- The resident at 6 Cliff Street wants to save the pine tree at the southwest corner of the property.
- Cliff Street is being used by vehicular traffic, and there have been no impacts to the construction activity from the traffic thus far.
- The estimated remaining shotcrete volume is now about 75 cubic yards (cy), instead of about 150 cy. Janod anticipates resuming the Cliff Street shotcrete operation in about 2 weeks.
- Janod and Golder requested that the City reconstruct the surface water diversion in front of the jersey barriers prior to resuming the shotcrete operation. The City will look into either placing a new asphalt curb in front of the barriers, or placing new sand bags along the hoarding structure.

8. Tecco Mesh in Areas 3B and 4B:

- The easement for the Tecco anchors in Area 3B has not been signed yet by the residents at 11 Cliff Street (the Bartram's). The City will forward the easement once it is ready, and get it notarized.
- The City indicated that VTrans has identified the Tecco mesh in Area 3B as a cost that may not be 100% reimbursable by FHWA emergency funding.
- Golder is now recommending that Tecco mesh be applied to the steep soil surface to the southwest of the shotcrete wall along Cliff Street (i.e., top of Area 4B). This in effect moves the Tecco in Area 3B to Area 4B.
- The City may still consider installing the Tecco mesh in Area 3B. The City requested Golder provide plausible ramifications if Tecco is not installed in Area 3B.

9. Drain Holes:

- The City asked if the number of anticipated drain holes may drop. Golder stated that only one anchor drill hole (No. 4D) has produced groundwater during drilling (about 20 ft into the face, at about 12 ft below the Cliff Street grade).
- Golder will reevaluate drain hole spacing based on encountered conditions in Areas 4A and Area 2, as drilling progresses. If the joints/discontinuities are

mostly dry, and occur at a frequency less than expected, only ½ of the drainholes anticipated may be necessary.

10. Pay Items:

- The City would like the final quantities spreadsheet (to be based on the final design drawings) to use unique pay item numbers for each pay item in all the zones. The purpose of this is to track the same pay item across the zones. The previous quantities spreadsheet used different pay item numbers for the same pay item within each zone.
- The City requested Golder track the days and hours worked by Dubois. Dubois will not submit daily quantities sheets for Golder to review.

**Action Items:**

1. Golder will contact VTrans regarding the status of the formal laboratory data sheets.
2. Golder plans on submitting the final drawing set this week, as well as the final estimated quantities spreadsheet.
3. Golder will submit to VTrans for review on behalf of the City the final calculation package along with the final design drawings. The calculations were used to prepare the design drawings.