



# Sanborn, Head & Associates

*Consulting Engineers & Scientists*

## MEMORANDUM

**To:** Meeting Attendees

**From:** David Cedarholm, P.E.

**File:** 2364

**Date:** September 10, 2004

**Re:** September 7, 2004 Construction Meeting Minutes  
Grading Modifications Project  
North Country Environmental Services, Inc. Landfill  
Bethlehem, New Hampshire

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### Meeting Attendees:

Gene Martin, North Country Environmental Services, Inc. (NCES)  
Sean Moran, NCES  
Bob Maccini, Paragon Construction Inc. (PCI)  
Gary Tomlinson, PCI  
Dave Cedarholm, Sanborn, Head & Associates, Inc. (SHA)  
Mike Hildenbrand, SHA

The Construction Meeting was held in the NCES office conference room and began at approximately 1030 hours.

### ITEMS PROVIDED

The following items were provided:

1. SHA distributed copies of the August 31, 2004 Construction Meeting Minutes.
2. SHA provided a draft Change Order No. 3 response letter.
3. PCI provided an updated Construction schedule.

*Paul M. Sanborn • Charles L. Head • R. Scott Shillaber • Charles A. Crocetti  
Mathew A. DiPilato • Daniel B. Carr • Duncan W. Wood • Joseph G. Engels • Vernon R. Kokosa*

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*Gene met w/ Dan Tucker @ 1 pm regarding siltation*

## PREVIOUS MEETING MINUTES

Dave asked if there were comments regarding the Construction Meeting Minutes from August 31, 2004. Jim noted that Item 21 on page 4 should reference Laurel Lane rather than Trudeau Road. The remaining minutes from the August 31, 2004 Construction Meeting were accepted as written.

## OLD BUSINESS

1. Discussion of Change Order No. 3 was deferred until the end of the meeting.
2. Dave asked about the status of the sideriser building relocation. Gary reported that the building was scheduled to be placed on its new foundation this week. Gary provided documentation from Persons Concrete indicating that the concrete mix strength used to fill the sideriser pipe slots in the sideriser building foundation was 4,000 pounds per square inch (psi). *weather caused weather*
3. Dave asked if there were any health and safety issues reported during the past week. Mike suggested that PCI more closely monitor their visual safety barrier on top of the MSE berm. Gary indicated that PCI had reestablished the visual safety barrier. Gary also reported that a worker left the site early last Tuesday, August 31, 2004 complaining of nausea, but was back on-site the next day.
4. Jim asked if the new swale that PCI constructed in the southwest corner of the project was helping PCI with respect to controlling sedimentation. Gary indicated that the new swale appeared to be working as planned, and has helped limit off-site sedimentation. Dave asked if PCI was still able to gain access along the toe of slope near the southeast corner of the site. Gary indicated that the access to the southeast corner toe of slope was limited, and that it was questionable whether there was enough width to maneuver a piece of equipment into the lower southeast corner to remove accumulated silt and sediment. He suggested that wheelbarrows may be necessary.
5. Gene reported that Sean Moran and Bill Hirsch met with the abutting property owner, Mr. Daniel Tucker, last Friday to discuss and observe the siltation that has occurred in the woods on Mr. Tucker's property as a result of this project. Mr. Tucker planned to observe the extent of the siltation over the weekend, and was expecting to get back in contact with NCES regarding any necessary action sometime this week.
6. RTD was scheduled to return to the site Thursday, September 9, 2004 to resume geosynthetics installation.
7. Dave asked whether PCI was still planning to install a temporary pipe to convey stormwater from the vicinity of the zigzag fold into inlet structure C-4. Gary reported

that PCI planned to at least cut a hole into the structure and shape a swale toward the hole, or PCI may decide to install a pipe. Dave asked if PCI planned to core a hole into the structure. Gary indicated that PCI planned to use a pipe saw to cut the hole, but would take care not to damage the structure. Bob indicated that if PCI does install a temporary pipe, they plan to permanently cap both pipe ends prior to completing the geosynthetics installation.

8. Dave asked if the leachate management piping at the Stage III sideriser building was functioning as intended. Gary indicated that so far there were no problems that he was aware of.
9. Dave asked how many crews Gary had working. Gary indicated that he had four crews working on four separate tasks; the MSE berm, the sideriser building, placing 1-inch minus till, and silt removal from the liner. Gary indicated that the crew engaged in placing the 1-inch minus till would be compacting the material with the roller later in the day in preparation for a forecast rain event.
10. Bob reported that the pitless adaptors have been shipped from the manufacturer. He indicated that the remaining components needed for the project are readily available, so he did not expect any delays resulting from long supplier lead times. There was a discussion regarding the valves for Valve Box 301. Gary mentioned that Sean Moran had indicated that NCES may be ordering the valves and actuators for Valve Box 301 as soon as possible due to problems they are experiencing with the leachate combustion system. Gary offered to contact Sean for the status of the valves and limit switch for Valve Box 301. Gary indicated he would let Bob know whether or not to cancel the valve, actuator, and limit switch order.
11. Mike reported that last week PCI satisfactorily excavated material from beneath the geosynthetics fold at a number of locations to allow the geosynthetics to relax into depressions and drain as discussed in previous meetings.
12. Dave asked when PCI planned to address the erosion and sediment issues downgradient of the level spreader that were discussed last week. Gary indicated that PCI planned to correct the erosion and sedimentation issues in the area downgradient of the level spreader and along Laurel Lane later in the day.
13. Dave reported that the operating pressure of the Stage III sideriser building piping was reportedly at least 60 psig, and indicated that the pressure test for the piping inside the Stage III sideriser pipes should be pressure tested to 90 psig, rather than performing a 60 psig test as discussed at the previous construction meeting. Bob indicated that performing a pressure test at 90 psig would not be a problem.

14. Bob reported that Gates Electric was expected to provide a submittal for the electric conduit pull box to be installed adjacent to the Stage III sideriser building.
15. Bob provided an updated Construction Schedule for review. Jim suggested that PCI begin placing loam and seed this week, or next, on areas that can be completed to provide sufficient time to establish vegetation this fall. Bob said PCI was considering installing erosion control blanket to protect the sideslopes against erosion. Jim suggested that PCI consider applying a bonded fiber matrix with their hydroseeder as a potentially less expensive alternative to erosion control blanket.
16. Jim asked about the "diaper" that PCI had installed below the Volvo haul unit to catch leaking oil. Gary indicated that the diaper arrangement, which consisted of a piece of geomembrane stung beneath the truck with oleophilic rags, was a temporary fix, and that PCI planned to have their mechanic fix the Volvo's oil leaks before the day's end.

## **PROGRESS REPORT**

Gary provided PCI's progress report.

1. Approximately 1,000 cubic yards of 8-inch minus till was required to complete the fill of that material;
2. 1-inch minus till was placed from the sideriser building north to Culvert C-4, and continued to be placed;
3. The Select Sand, limit of waste containment markers, and plywood were placed along the south and southeast sides of the site;
4. The south side and southeast corners of the site are almost ready for installation of the perimeter swales and perimeter road;
5. The slots in the sideriser building foundation for the sideriser pipes were poured;
6. The cleanouts for the sideriser building were set in their vertical position;
7. 1-inch minus till was placed and compacted on the southwest facing side of the northeast berm;
8. The anchor trench was excavated in the northeast berm;
9. Approximately 526 square feet (measured on the face) of MSE berm was constructed in the last two weeks; and

→ / 15 end of month?

Sub completion  
final conf.

10/11/04  
10/18/04

except C.O. #3 problem  
September 10, 2004  
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10. Erosion and sediment control, and dust control efforts continue.

## NEW BUSINESS

1. Jim suggested that the wet area on the north end of the installed 8-inch gas header, and the anchor trench on the northeast berm, should be graded so that stormwater is not allowed to pond in the trenches. Gary indicated that PCI planned to extend the trenches to allow both areas to drain before the rain anticipated for later this week arrives.
2. Dave reported that there was a narrow strip of exposed geocomposite along the south edge of the geosynthetics laid up on the landfill near liner panel SP-51. It appeared to be a small section of primary geocomposite. Gary indicated that PCI would cover the exposed geocomposite as soon as possible.
3. Dave indicated that an 8-inch gas header pipe near the southeast corner of the site had an open end. Gary indicated that PCI would cover the end of the pipe as soon as possible.
4. Dave distributed SHA's September 2, 2004 draft letter, which was prepared based on a review of PCI's Change Order No. 3. Gene said that SHA's letter summarizes the events that took place with regard to the void repair, and provides a starting point, for a discussion regarding final payment for the work. There was a discussion about when the void was first discovered, and who was notified, and it was acknowledged that a void existed prior to when stormwater was documented to having entered the void on June 22, 2004 as indicated on the letter. Gary indicated that he first heard about the void when it was identified that stormwater had entered it. Gary added that James Vicniere and Mike Hildenbrand had apparently identified the existence of the void a few weeks prior when the liner was first exposed in that area.

Jim summarized the accounts detailed in the letter including the failed attempt to grout the void.

Bob said that he felt that PCI had maintained accurate records of labor and equipment used during the repair efforts, and suggested that they would re-evaluate their time and material requests. Dave summarized his approach in evaluating PCI's time and material request slips, and provided attendees with copies of SHA's void repair cost estimate calculation table. Bob suggested that Gary and Mike get together to discuss the time and material requests and agree on quantities, then Bob would contact Dave to discuss the total requested amount for repair of the void. It was agreed that after Gary and Mike agreed on the labor and equipment quantities, Bob and Dave would discuss the quantities and come to some agreement.

Dave summarized the approach used to evaluate the cost for realigning the 8-inch gas header, and stated that it was based on payment item No. 22 from the Construction

Contract. Bob indicated that the \$22,000 requested was based on an estimate prepared prior to performing the work, but that PCI's actual cost to perform the work was higher. Jim said that SHA's suggested price of \$13.50 per linear foot was conservatively high based on a price of about \$7.50 per linear foot listed in RS Means for comparable trench work.

Gene mentioned that SHA had recommended to not extend the contract time by the requested 10-days. Gene reiterated that the total of all the project Change Orders was approaching \$250,000 and that he was not supportive of granting the 10-day extension. Gene added that he planned to discuss the matter with Joe Gay later in the week.

In an effort to get a better handle on the final project costs, Gene asked if anyone had any knowledge of items that may result in additional change orders, or had any suggestions for ways in which money could be saved on the project. Bob suggested that using boulders instead of guardrail on the edge of the perimeter road may be a way to save some money on the project, but the cost for placing boulders would have to be evaluated.

5. Dave stated that RTD had some additional welding to do at the extreme southwest end of the project to join the primary and secondary liners together.
6. Mike mentioned that the liner panels on the northeast berm may not be long enough to extend into the anchor trench, and suggested that some panels may need to be extended, which may require that the horizontal seams be staggered.

## **PUNCH LIST**

Following is a Punch List of items to be completed that were discussed at previous meetings.

1. Leachate force main installation between Valve Box 301 and the 1,000-gallon underground storage tank;
2. Backfill the electrical pull box near the toe of the MSE berm;
3. Install monitoring well extension protective casings with Royer locking caps and labels;
4. Remove silt from the swale west of the stockpile area;
5. Install the 14-inch gas valves;
6. Replace the mortar around the outlet pipe penetration in the Detention Pond No. 4 outlet structure;
7. Install steel security risers on Monitoring wells B-103D and B-103S; and
8. Possibly install a replacement floor drain in the Quonset Hut.

The meeting adjourned at approximately 1300 hours. The next meeting was scheduled for September 14, 2004 at 1030 hours.