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November 29, 2012

Mr. Allen Gaither  
Environmental Engineer I  
North Carolina Department of Environment and Natural Resources  
Division of Waste Management  
Solid Waste Section  
Asheville Regional Office  
2090 US Highway 70  
Swannanoa, NC 28778

Subject: Buncombe County Solid Waste Management Facility  
Phase 5 C&D Landfill Expansion Project  
Permit No. 11-07  
Construction Certification

Dear Mr. Gaither:

On behalf of Buncombe County, Camp Dresser McKee & Smith (CDM Smith) is submitting one (1) copy of the as-built drawings (see Appendix A) of the Phase 5 C&D Debris Landfill Expansion at the Buncombe County Solid Waste Management Facility. As presented in the April 2009 Substantial Amendment and Phase 5 Permit to Construction Application on Sheet EP-3 in Appendix D of Part 5: Engineering Plan, subgrade fill was not placed in the Phase 5 area. Therefore, the field quality control tests as stated in the Construction Quality Assurance Plan (CQA) were not required. Work included removal of vegetation, trees, and roots from the disposal area. The area was left in a roughened condition to allow vegetation to grow and stabilize.

Please accept this letter as the certification statement required by Rule .0541(d)(4). To the best of my knowledge, information, and belief, the construction of Phase 5 was completed in general accordance with:

- The CQA Plan;
- The conditions of the Permit to Construct (Permit No. 11-07);
- The requirements of Rule .0541; and
- Acceptable engineering practices.

Permit No.	Date	DIN
11-07	December 6, 2012	17818

RECEIVED

**December 4, 2012**  
Solid Waste Section  
Asheville Regional Office





Mr. Allen Gaither  
November 29, 2012  
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Appendix B includes a summary of daily reports during the construction. Please note that these daily reports also include work unrelated to the Phase 5 C&D Landfill Expansion. Appendix C presents construction photographs and an aerial of the completed work.

The Permit to Construct for the Phase 5 C&D Landfill Expansion was approved on June 7, 2010. Part III: Construction and Demolition Debris Landfill Unit Specific Conditions, Item 20c. states, 'The Permittee must contact the appropriate regional environmental specialist and permitting engineer to determine whether the Section chooses to hold a pre-operative meeting with key landfill personnel and representatives of the Section.' Please accept this letter as notification for the Solid Waste Section to conduct this site visit.

Please do not hesitate to contact me at (919) 787-5620 if you have any questions or if there is anything I can do to facilitate the review and approval of this request.

Sincerely,

Kenton J. Yang, P.E.  
CDM Smith Inc.

cc: E. Mussler, NCDENR (SWS)  
J. Creighton, BCSWMF  
J. Mears, BCSWMF  
K. Smith, BCSWMF  
J. Wiseman, CDM Smith  
M. Brinchek, CDM Smith



## **Construction Certification**

### **Appendix A Construction As-built**



**Construction Certification**

**Appendix B**  
**Summary of Daily Reports**

## Daily Reports

Job No:

Date: 11/12/2012

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Monday</b>							
4/9/12	CDM Constructors Inc.	00002	65-70	Clear & Sunny	10-20	None	Phillips and Jordan started mobilization and digging soils for test requirements and also received fuel tank for storage. CDM coordinated with Buncombe County to locate the fuel tank out of the normal operations of the landfill. / P&J also had surveyors onsite to set control points for their work
<b>Tuesday</b>							
4/10/12	CDM Constructors Inc.	00003	65-70	Clear & Sunny	10-20	None	No work onsite by any subs
<b>Wednesday</b>							
4/11/12	CDM Constructors Inc.	00004	35-40	Clear & Sunny	10-20	None	P&J superintendent onsite to receive equipment. CDM held prebid meeting at downtown planning office for phase 2 of phase 5 C&D expansion
<b>Thursday</b>							
4/12/12	CDM Constructors Inc.	00005	45-50	Clear & Sunny	00-10	None	oversee P&J mobilization to site and coordinating with the county for layout and jobsite trailer locations. / P&J started surveying in the limits of construction to get ready for the clearing crew to arrive on Monday the 16th.
<b>Friday</b>							
4/13/12	CDM Constructors Inc.	00006	45-50	Clear & Sunny	00-10	None	P&J onsite until 1930 flagging limits of construction and do not disturb area's. / no equipment arrived and P&J site super stated they have got all equipment onsite and will be ready to start on monday the 16th
<b>Saturday</b>							
4/14/12	CDM Constructors Inc.	00007	45-50	Clear & Sunny	00-10	None	P&J onsite until 1500 to finish flagging limits of construction and do not disturb area's. / site clearing crew will arrive Monday along with drilling crew to start abandonment
<b>Sunday</b>							
4/15/12	CDM Constructors Inc.	00008					No work onsite by any subs
<b>Monday</b>							
4/16/12	CDM Constructors Inc.	00009	55-60	Clear & Sunny	00-10	None	P&J start the clearing activities in the roadway going to future sediment pond 12 and continuing to pond 11. Trees were piled and due to a burn ban cannot be burnt now. NCDENR / air quality dept. was onsite to meet with P&J clearing forman and issued a permit to be active after a rain event and a follow up phone call to his office. He may return to inspect burning site before activating the permit. P&J subbed the well abandonment to Bunnell-Lammons Engineering, Inc. ( BLE ) which subbed Metro Drilling Inc. ( MDI ) to perform the work. / MDI and BLE arrived onsite approx 1000 and after a safety meeting and verification of drill operators certification they set up on well B-227 and started drilling at 1200. CDMSmith hydrologist Dan Forbes from Rallegth office was onsite to oversee the abandonment. After B-227 they moved and set up on well number B-627s. Completed B-227s set up on B-227d and left site at 1600. P&J continued clearing and pumping water from pond 11 until 1830 and left site.

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Tuesday</b>							
4/17/12	CDM Constructors Inc.	00010	55-60	Prt Cloudy	10-20	Rain	Oversight of P&J clearing activities. P&J got all trees and brush around future sedimentation pond 12 and new C&D area on to the ground and most of it piled up to burn. clearing around the pond 10 expansion area still needs to be completed. P&J second crew continued to pump down pond 11 for demucking, created stormwater berms around the limits of construction, built brush dams and installed silt fence in areas of concern for rain that is expected tonight and tomorrow. / Metro Drilling, over drilled well #627d and moved and set up on well # B-626 under the supervision of Dan Forbes of CDMSmith (see Dan's report under Additional Comments) and then left site at 1500.
<b>Wednesday</b>							
4/18/12	CDM Constructors Inc.	00011	55-60	Mstly Cloudy	00-10	Rain	CDM installed jobsite posting board at the back entrance that is being used by subs and meet with contractor about blasting and crushing rock for future work / P&J dirt crew came to site to see evaluate damage from overnight rain but performed no work and left site at 1200. no work for clearing crew or drillers due to 2.5 inches of rain from 1800 yesterday to 1200 today.
<b>Thursday</b>							
4/19/12	CDM Constructors Inc.	00012	50-55	Overcast	00-10	Drizzle	P&J installing grade stakes for roadway slopes , / metro drilling working onsite with Dan Forbes on well 626 and 623 ( see report attached under additional comments )
<b>Friday</b>							
4/20/12	CDM Constructors Inc.	00013	50-55	Overcast	00-10	Drizzle	P&J onsite getting GPS set up on equipment to be used for grading and assist metro drilling moving between well location . Metro drilling onsite to continue well abandonment with Dan Forbes ( see Dans report under additional comments)
<b>Saturday</b>							
4/21/12	CDM Constructors Inc.	00014					no work onsite
<b>Sunday</b>							
4/22/12	CDM Constructors Inc.	00015					no work onsite
<b>Monday</b>							
4/23/12	CDM Constructors Inc.	00016	35-40	Overcast	30-40	Flurries	P&J pumping the water out of sedimentation pond 11 and installing 800LF of silt fence on the down grade side of the C&D roadway construction area./P&J also started burning the brush pile piled up last week and left 1 man onsite overnight to insure the fires didn't get out of control. metro drilling was onsite to finish the abandonment of well B 234 and then started and completed abandonment of well B-615. they ran out of grout and left site approximately 1530. (see Dan Forbes report under additional comments)

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Tuesday</b>							
4/24/12	CDM Constructors Inc.	00017	40-45	Prt Cloudy	20-30	None	P&J installing and repairing silt fence from weekends rain, maintaining roads for metro drilling to allow for abandonment, pumping water from sedimentation pond 11, and continuing to burn the brush cleared from the c&d expansion area. P&J clearing forman and 1 operator stayed overnight to maintain fires and help get the remainder of the brush cleared and burned before Fridays ribbon cutting event to minimize the smoke that will be in the air. / Metro drilling continued abandonment activities at a slow pace under the supervision of Dan Forbes of CDMSmith Raleigh office. ( see Dans report under additional comments)
<b>Wednesday</b>							
4/25/12	CDM Constructors Inc.	00018	55-60	Prt Cloudy	00-10	None	P&J's clearing crew continuing to burn brush from the C&D expansion area and clearing and grubbing the small area east of pond 10 where the pond 10 expansion cleanout and grade work will be done and hauling the brush to the C&D area to be burned with the other piles. the dirt and grading crew was sent home because of wet conditions from last nights rain. one operator foreman was left onsite to maintain roads and move the drill rig around when needed. Dan Forbes was onsite to supervise the proper abandonment of the wells and document. (See his report attached under additional comments). Shamrock Enviromental started to mob today by bringing in a excavator and staging it south of the area 1 access road. More equipment to arrive later this week.
<b>Thursday</b>							
4/26/12	CDM Constructors Inc.	00019	60-65	Overcast	00-10	Rain	P&J maintained silt fence and silt basins from rains this morning and pulled the drill rig around to help drillers get 3 wells abandon. rain was a problem and no dirt work was done today. clearing crew finished all the clearing and left site yesterday. Dan woods was onsite for well abandonment oversight untill 1430 when the drill crew rained out. Dans report under additional comments.
<b>Friday</b>							
4/27/12	CDM Constructors Inc.	00020	50-55	Clear & Sunny	00-10	None	P&J starting slopes and roadways in the C&D area, start stripping topsoils, and continue to pump water from pond 11 for demucking. / Shamrock enviromental delivered off road dump and HDPE fusion machine for next weeks work.
<b>Saturday</b>							
4/28/12	CDM Constructors Inc.	00021	55-60	Clear & Sunny	00-10	None	P&J continue slopes and roadways in the C&D area, start stripping topsoils, and continue to pump water from pond 11 for demucking. /
<b>Sunday</b>							
4/29/12	CDM Constructors Inc.	00022					no work onsite

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Monday</b>							
4/30/12	CDM Constructors Inc.	00023	55-60	Clear & Sunny	00-10	None	P&J demucking pond 11 and hauling the spoils to designated borrow pit also continuing to shape and grade the C&D expansion area and roadways. / Shamrock enviromental arrived onsite today and set up for starting fusion welding tomorrow. deliveries started for Shamrock and will continue thru out the project and will be listed under materials section of report. / Metro Drilling arrived onsite and set up to abandon the 2 remaining wells. they overdrilled and abandon well B-616 and then moved to well-B-618. they finished abandonment and demobed at 1400.
<b>Tuesday</b>							
5/1/12	CDM Constructors Inc.	00024	55-60	Clear & Sunny	00-10	None	P&J continue to strip topsoil and start hauling to stockpiled area. also finished burning remainder of big logs from clearing activities. spoke with P&J about the silt fence that needed repair from last nights rain and was told they would repair tomorrow am. Shamrock was onsite and started fusing strings together for the HIT installation. 3 loads of stone was delivered but the landfill was too wet to stock pile where it was needed so the trucks were cut off.
<b>Wednesday</b>							
5/2/12	CDM Constructors Inc.	00025	55-60	Clear & Sunny	00-10	None	P&J continuing to strip and haul topsoils to the stockpile, more water control measures were put in to help stop the problem of water over coming the silt fence at the future sed. pond 12 area. the silt fence in this area was repaired and reinforced with 57 stone and a second silt fence staked at the limits of construction. P&J also started the installation of the baffles at pond 11. / Shamrock continued fabing drip legs and stringers of perf.pipe and had the line locations surveyed to show the layout of the lines on the plane of the landfill.
<b>Thursday</b>							
5/3/12	CDM Constructors Inc.	00026	55-60	Clear & Sunny	00-10	None	P&J onsite working on the completion of the baffle installation in pond 11, continuing loading out stripping and hauling to the stock pile, installing silt fence around top soil stock piles and readying the site for a long weekend away from the job. / shamrock was onsite to continue prefabbing stringers for the HIT installation to begin next week.
<b>Friday</b>							
5/4/12	CDM Constructors Inc.	00027					no work onsite
<b>Saturday</b>							
5/5/12	CDM Constructors Inc.	00028					no work onsite
<b>Sunday</b>							
5/6/12	CDM Constructors Inc.	00029					no work onsite

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Monday</b>							
5/7/12	CDM Constructors Inc.	00030	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continuing to haul top soils and strippings to the stock pile area from the C&amp;D expansion area and pond 12. also started stripping the area of pond 10 expansion and piling up for hauling out./ spoke with Jim Bleavins site super for P&amp;J about dust control and they stated they will get a water truck to help with the problem.</p> <p>Shamrock started trenching today for the HIT line number 6E/595' line on the west side of the landfill. they excavated trash and hauled to the active face approx 400' and install the gravel bedding and perf. pipe in that section. they will continue this line tomorrow. all spoils was cleaned and hauled by the end of the day to not allow for trash to blow or migrate around overnight.</p>
<b>Tuesday</b>							
5/8/12	CDM Constructors Inc.	00031	50-55	Overcast	00-10	Rain	<p>P&amp;J crew sent home early due to 1/10th of rain overnight. 1 foreman and 1 operator remained onsite to unload RCP pipe and set up the GPS on the JD700 dozer for grading activities later this week. CDM sat in on P&amp;J weekly tool box safety meeting this morning before the workers were sent home.</p> <p>Shamrock continued trenching the HIT-6E trench and finished installing the No 4 stone, pipe and started the common fill over the trench. CDM cordinated with Buncombe County a water source for the water needed to install the clay plug at the perf pipe end.</p>
<b>Wednesday</b>							
5/9/12	CDM Constructors Inc.	00032	55-60	Overcast	00-10	Rain	<p>Shamrock arrived onsite and decided to not work due to overnight and continuing rain. Muddy materials on the top of area 1 made getting around difficult.</p> <p>P&amp;J started hauling stripping materials from the pond 10 enhancement area to the stock pile untill approx. 1100 and called the day for rain.</p>
<b>Thursday</b>							
5/10/12	CDM Constructors Inc.	00033	40-45	Clear & Sunny	00-10	None	<p>P&amp;J continued hauling stripped soils from the pond 10 area to the stock pile. Also started demucking the area of the pond 12 construction to allow the spring that was found to flow off site through a silt basin and not create any more muck by pooling. P&amp;J took a sample of the cell 6 stock pile to BLE for testing to see if it meets the spec for the clay plug at the bottom of the pond 12 berm.</p> <p>Shamrock started trenching the HIT trench from the north edge of the landfill toward the active face and hauling the spoils to the active face. Clay bedding from the cell 6 stock pile was installed under the solid section of the pipe and compacted. Approx. 400' of pipe and no. 4 stone were installed by end of work day. All spoils were cleaned and hauled to the active face before leaving site and the trench was backfilled up to the area that was completed to minimize the amount of trench left open.</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Friday</b>							
5/11/12	CDM Constructors Inc.	00034	45-50	Clear & Sunny	00-10	None	<p>P&amp;J excavating soil from the pond 10 regrading area and hauling to the stock pile. Some rippable rock was encountered in the soils and we are expecting to have a lot more rock to come from that area before excavation is complete.</p> <p>Shamrock excavated the tie in point for the 24" to 10" connection on the east side of the cell 6 control panel and found the drawings for the pipe layout and what was in the field do not match and would need more fittings than was on site to be installed.</p> <p>Shamrock then moved back to the landfill area to continue working on the HIT6D trench. They completed HIT6D trench by the end of the day and started the HIT6C trenching. All trash was hauled to the active face by the end of the day.</p>
<b>Saturday</b>							
5/12/12	CDM Constructors Inc.	00035	50-55	Prt Cloudy	00-10	None	<p>P&amp;J continued excavating the pond 10 cut and hauling to the stock pile and dressing up area for expected rain tomorrow.</p> <p>Shamrock continued trenching on HIT6-C trench and installed the clay plug. Moved to filling the excavation at the tie in area for expected rain tomorrow. Started hauling fill for the final cover of the HIT6-D trench.</p>
<b>Sunday</b>							
5/13/12	CDM Constructors Inc.	00036					no work at site
<b>Monday</b>							
5/14/12	CDM Constructors Inc.	00037	55-60	Mstly Cloudy	00-10	Rain	<p>rain event yesterday caused work area's to be wet and unworkable for P&amp;J. P&amp;J had 1 foreman and 1 operator onsite to check for erosion issues. no problems were found and they left site at 1100</p> <p>Shamrock could not trench due to wet conditions. they moved their fusion machine to higher ground and started fusion of perf. pipe untill a rain and lightning storm blew in at 1445. they then packed up and left site.</p>
<b>Tuesday</b>							
5/15/12	CDM Constructors Inc.	00038	55-60	Mstly Cloudy	00-10	Rain	<p>Shamrock onsite to continue fusion of perf pipe and start some fabrication of drip leg Y fittings. rain and lightning stopped work at 1530 for Shamrock.</p> <p>P&amp;J continued working on the pond 10 regrading excavation and hauling the spoils to the stock pile area. the morning was slow due to prep of the work area and removal of mud to allow for safe operations of the trucks on the steep slope going into the pond 10 area.</p> <p>they worked untill the lighting storm at 1530 and shut down to wait out the storm. after the lightning cleared at 1615 continued the excavation untill 1800 when another bad storm stopped work for the day.</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Wednesday</b>							
5/16/12	CDM Constructors Inc.	00039	50-55	Clear & Sunny	00-10	None	<p>P&amp;J continued working on pond 10 excavation and moved a dozier and roller to the road entrance to pond 12 to start placing and compacting fill materials. BLE was scheduled to be onsite in the afternoon to start taking density test but a break down of the roller stopped production and BLE was put off until tomorrow.</p> <p>Shamrock arrived and continued trenching where the left off on Saturday's work of HIT6-C. they had 2 additional men onsite to help speed the activities and completed the installation of HIT6-C by the end of the day. the spoils and area were cleaned up and hauled to the active face by days end and back filling of the trench with markers for surveyors was about 50% completed.</p>
<b>Thursday</b>							
5/17/12	CDM Constructors Inc.	00040	50-55	Prt Cloudy	00-10	Rain	<p>P&amp;J continued the pond 10 excavation and filling/compaction in the pond 12 access road. LBE onsite to take density test of the filled area's. after the first couple test the tech. stated the materials appeared to match a proctor that they had real close and close moisture content with a compaction of 98%.</p> <p>Shamrock started trenching on HIT6-B. the trench was excavated approx 400 feet and spoils were cleaned and hauled to active face by the end of the day.</p>
<b>Friday</b>							
5/18/12	CDM Constructors Inc.	00041	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued excavating pond 10 expansion area and hauling the materials to the stock pile until lunch. at that point the started hauling the stripping to the fill area on future pond 11 access road. after a few loads the material was not exceeding the moisture limits and they started hauling back to the stock pile and cutting soil from some of the cut area to use for fill on the roadway.</p> <p>Shamrock continued and finished the HIT6-B trenching, gravel and pipe installation. They hauled all spoils and cleaned the work area of exposed trash and left site at 1930.</p>
<b>Saturday</b>							
5/19/12	CDM Constructors Inc.	00042	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued hauling stripping from pond 10 expansion area with 1 off road truck to the stock pile and loading soil from the cut area's and hauling that soil to the fill area with 1 truck. P&amp;J worked a half day and left site at 1200.</p> <p>Shamrock env. started the HIT6-A trench and continued through the day working on digging trash and installing gravel bedding, pipe and top gravel pipe until approx. 1830 then left site.</p>
<b>Sunday</b>							
5/20/12	CDM Constructors Inc.	00043					no work at site

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Monday</b>							
5/21/12	CDM Constructors Inc.	00044	55-60	Prt Cloudy	10-20	Drizzle	<p>Shamrock continued and finished the HIT6-A trench and backfilled the trench with gravel. then moved into replacing the soil cover of all area's that were left low of soil on all trenches.</p> <p>P&amp;J continued stripping the soil from the cut area under the radio tower and hauling some of that material to the fill area's west of future pond 12, some to the roadway fill area east of future pond 12 and some to the stock pile, depending on the amount of roots and topsoil in the area they were cutting. BLE was onsite testing density's in the lifts installed Saturday and testing materials placed and compacted today.</p>
<b>Tuesday</b>							
5/22/12	CDM Constructors Inc.	00045	50-55	Prt Cloudy	00-10	None	<p>P&amp;J continue excavating the cut area below the radio tower and hauling some to the stock pile and some to the fill area on the access road leading to future pond 12 area. some of the cut material was rocky and contained roots and it was stock piled. BLE was onsite performing testing, and 1 load of material was deemed to wet and not with in any fairmy of proctors that have been tested. P&amp;J was instructed to remove the material from the fill area and hauled it to the stockpile</p> <p>Shamrock finished hauling soil to bring the trenches back to grade and smoothing it out. They then moved to improving slope access from the bottom and moving their trailer to keep it out of the standing water issues on the top. Shamrock then started hauling clay fill material to a stockpile on the side slope to use for pipe bedding and pipe cover.</p>
<b>Wednesday</b>							
5/23/12	CDM Constructors Inc.	00046					<p>Shamrock started excavating the drip line trench from HIT6-A at the valve down the slope to its tie in point , installing the clay bedding and compacting the bedding materials.</p> <p>P&amp;J moved back to hauling soil from the pond 10 excavation to the fill area of the access road , to pond 12 and from pond 12 to pond 11 future access road. also excavating a small area on the west side of the do not disturb area closest to pond 11 and hauling that material to fill area's and compacting.</p>
<b>Thursday</b>							
5/24/12	CDM Constructors Inc.	00047	55-60	Clear & Sunny	00-10	None	<p>P&amp;J started hauling soil from the cell 6 stock pile to the access road for pond 12 and compacting.</p> <p>Shamrock started excavating for the p trap and drip leg of HIT6-B line.also finished installing the valve at HIT6-A. all the trash that was excavated was hauled to the active face of the landfill and Shamrock left site at approx 1300 for the weekend.</p>
<b>Friday</b>							
5/25/12	CDM Constructors Inc.	00048					no work at site
<b>Saturday</b>							
5/26/12	CDM Constructors Inc.	00049					no work at site

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Sunday</b>							
5/27/12	CDM Constructors Inc.	00050					no work at site
<b>Monday</b>							
5/28/12	CDM Constructors Inc.	00051					no work at site
<b>Tuesday</b>							
5/29/12	CDM Constructors Inc.	00052	55-60	Prt Cloudy	00-10	Rain	<p>Shamrock arrived onsite at 1300 and started working on the drip leg trench from HIT6-C to the tie in point of drip leg from HIT6-B. The trench was excavated and clay bedding was put in place and compacted until rain stopped work at 1845.</p> <p>P&amp;J continued hauling soil from cell 6 stock pile and placing in the road way leading to future pond 12 area and compacting. Also cleared a small amount of tree's that was with in the limits of construction after a change in the road to dam transition design.</p>
<b>Wednesday</b>							
5/30/12	CDM Constructors Inc.	00053	60-65	Clear & Sunny	00-10	None	<p>P&amp;J continuing to haul fill from cell 6 stock pile to the access road to pond 12, placing and compacting. they also recieved materials for the under drain at pond 12 and started filling the base layers of the embankment for pond 12</p> <p>Shamrock continued working on drip leg installation for the HIT6 lines A,B,and C and compacting around the p traps and pipe installed</p>
<b>Thursday</b>							
5/31/12	CDM Constructors Inc.	00054	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued filling the access road to pond 12 area with soil from the cell 6 stock pile. After a small amount of fill was placed they stopped filling and started installing the under drain for the spring that was found to try and get it installed before predicted rain tonight. P&amp;J's crew that was hauling fill moved to clean out the ditches to start the channel 10.1,12.1A and 10.2a construction. BLE was onsite to take density test on the fill materials placed by P&amp;J and the compaction reports are under attachments to this daily report.</p> <p>Kenton Yang and Mike Brinckek was onsite today and after the layout of channel 10.1 was done the decision was made to move the alignment of the channel and roadway to avoid excavation of trash on the C&amp;D landfill slope. There was also talk of redesign of the pond 10 slope area to minimize the rock excavation in that area and M. Brinckek will be looking at topo's shot by P&amp;J to revise the design.</p> <p>Shamrock continued working on the drip leg installation for the HIT lines in the cell 6 area and trying to complete and storm ready some of the trenches for the expected rains tonight. berms were placed back at the openings where the hit line came off the slope to minimize the run off from the top of the landfill.</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Friday</b>							
6/1/12	CDM Constructors Inc.	00055	60-65	Overcast	00-10	Rain	<p>no work by P&amp;J due to 4/10ths inch of rain overnight.</p> <p>Shamrock had to move from trenches that were open at HIT6-A,B and C due to overnight rains and start excavating for drip leg's D and E. Shamrock set the P trap for HIT 6-E and approx 30' of 4 inch pipe on the out fall side and moved to setting the P trap for HIT6-D and set it in the same manner and backfilled the area's for more expected rain this afternoon. the rain came approx 1600 and cut short Shamrocks day.</p>
<b>Saturday</b>							
6/2/12	CDM Constructors Inc.	00056	50-55	Clear & Sunny	10-20	None	<p>No work by P&amp;J due to yesterday's rain</p> <p>Shamrock due to yesterday's rain started to expose the valve to be relocated at the cell 6 control panel area for relocation. after hand digging approx 3'8" down and finding no pipes they took a probe rod and located the pipes approx 6' below surface. due to area restraints they were not able to expose the valve with mechanical tools and wouldn't be safe in the area with no room to slope the banks back and the depth of the hole. Site super for Shamrock Glenn Miller commented on finding out if they would need to get a change order for excavating more area and maybe having to move some of the inplace structure to allow for this work to be done.they then moved to redigging the HIT6-C and B trenches to remove the saturated bedding material and placing dry bedding materials and compacting. the trap line from the drip leg of HIT6-C and B were connected and run down the slope to approx 30' from the trap line A tie in point and those trenches were backfilled and compacted, with markers for the asbuilt survey to be taken and trenches that were left open minimized.</p>
<b>Sunday</b>							
6/3/12	CDM Constructors Inc.	00057					no work at site
<b>Monday</b>							
6/4/12	CDM Constructors Inc.	00058	55-60	Clear & Sunny	10-20	None	<p>P&amp;J demucking the area around the underdrain from silt washed in by rains late last week and backfilling it with good soil. P&amp;J continued filling the road and drainage channels below the radio tower with soil that was excavated from the slope north of the west side do not disturb area.</p> <p>Shamrock trenched from HIT6-E and HIT6-D to the point they Y'ed together and continued down slope to within 40' of the 6-C line tie in point. they installed the pipe in the trenches and then they started backfilling and compacting the area's over the piping installed today</p>

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<b>Tuesday</b>							
6/5/12	CDM Constructors Inc.	00059	55-60	Clear & Sunny	00-10	Drizzle	<p>P&amp;J continued hauling fill material from the cell 6 stock pile to the pond 12 bottom, placing and compacting. Also had an excavator continue stripping the spoils from the north slope of the west side do not disturb area and loading that fill for the roadway grading in the area of the radio tower.</p> <p>Shamrock was onsite and started work until a service tech from Cat arrived to work on the excavator about 0900. 1 worker continued backfilling trenches with a skid steer and 2 workers set idle. the tech was going to be working on the machine until 1400 or later so Shamrock decided to leave site about 1130 and return tomorrow.</p>
<b>Wednesday</b>							
6/6/12	CDM Constructors Inc.	00060	55-60	Clear & Sunny	00-10	None	<p>P&amp;J onsite continuing to fill the pond 12 bottom and embankment and stripping soil from the slope east of the embankment road. the spoils from the slope excavation in some areas was rocky and was hauled to the stock pile. Spoils from the slope excavation that were acceptable were hauled to the road fill below the radio tower.</p> <p>Shamrock continued installing 4" trap lines and making the y connections to the main trunk of the drip line</p>
<b>Thursday</b>							
6/7/12	CDM Constructors Inc.	00061	55-60	Clear & Sunny	00-10	None	<p>Shamrock finished making the 4" trap line down the hill to a stopping point behind the concrete wall and started trenching for the 10" and 6" lines. the trench was opened about 1/2 way to the tie in point by day's end. they will continue the trench tomorrow down slope to the tie in point.</p> <p>P&amp;J started installation of the 18" RCP pipe for the pond 12 structure.</p>
<b>Friday</b>							
6/8/12	CDM Constructors Inc.	00062	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued piping the 18" RCP outlet piping for pond 12 to the point about 4 foot from the barrel riser location. then moved to installing the 15" RCP pipe on the west side of pond 12 (pipe 2) and completed in to a point about 15' from the yard inlet location. clay material was backfilled over the pipe and compacted to 18" above the pipes and common fill was placed and compacted.</p> <p>Shamrock continued digging for the 10 and 6" lines on the east side of the cell 6 control area and installed the piping to a point approx 40' from the tie in points. they then moved to marking the fitting and 50' marks for asbuilt shots and started backfilling and compacting the fill atop of the piping. Marker tape was installed over each line and backfilling continue until the end of the day</p>
<b>Saturday</b>							
6/9/12	CDM Constructors Inc.	00063	55-60	Clear & Sunny	00-10	None	<p>Shamrock continued filling and compacting the fill over the 10" and 6" piping that was installed yesterday and moved to hauling cover fill for the slope</p> <p>P&amp;J started excavating for and installing the 15" RCP pipe ( pipe 1) on the east side of pond 12 to a spot approx 15' from the yard inlet 2 location and started backfilling</p>

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<b>Sunday</b>							
6/10/12	CDM Constructors Inc.	00064					no work at site
<b>Monday</b>							
6/11/12	CDM Constructors Inc.	00065	55-60	Mstly Cloudy	00-10	Misty	<p>P&amp;J continued filling the pond 12 earthen embankment and trenches over the RCP pipe installed last week. part of the crew moved back to the pond 10 area and started dewatering the pond and continuing to remove the spoils from the slope regrading. new teeth was installed on the bucket of the 330 excavator allowing more rock materials to be ripped and removed than before.</p> <p>Shamrock started the excavation of the gas and leachate recirculation pipe trenches from HIT6-A and B and continued down slope toward the tie in point west of cell 6 control panel area.</p>
<b>Tuesday</b>							
6/12/12	CDM Constructors Inc.	00066	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continue excavating materials from the slope grading area of pond 10 and placing it in pond 10 to allow the excavator access and a place to sit for demucking that will begin tomorrow. the second half of the crew was assisting the concrete subs in laying out and forming the base for the headwall structure at pond 12. by the end of day the forms were in place and excavation of the footer below the base will begin tomorrow as well as steel placement.</p> <p>Shamrock continued installing the pipe for the gas and LR down the slope toward the west side tie in and backfilling and setting marker tape over the lines</p>
<b>Wednesday</b>							
6/13/12	CDM Constructors Inc.	00067	50-55	Clear & Sunny	00-10	None	<p>Shamrock spent today trying to air test the 4" trap lines that have been installed and backfilled. no pressure test was started due to system not being able to hold air long enough to start the test. the problem appears to be the are trying to test against ferco caps and they will not hold. by end of day they decided to order some weld on caps.</p> <p>P&amp;J started demucking pond 10 and constructing the west side bench after the muck was removed. the first survey shots taken after demucking showed a pond bottom elevation of 1928 and after demucking to the bottom of the pond it was determined the first shots were taken on the pond edge slope and not pond bottom. the 1926 elevation was reached in the pond and all muck was removed on the west side before fill materials was placed and rolled on the bench area. after the bench was installed i sent a email to Mike Brinchek regarding the flow line of the fabriform ditch and bench design. he will call me tomorrow to discuss the issue</p> <p>P&amp;J concrete crew dug out the footer under the base of the head wall at pond 12 and tied rebar. concrete is scheduled for installation tomorrow around noon. CDM has BLE under contract to perform the break and slump test.</p>

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<b>Thursday</b>							
6/14/12	CDM Constructors Inc.	00068	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued demucking pond 10 and regrading the slope east of pond 10 to create the eastside bench. there concrete crew finished tying the steel for the base of the pond 12 head wall and concrete arrived at 1100. 13 yards of concrete was ordered and approx 1/2 yard left over.</p> <p>BLE was onsite to collect the cylinders for break test and perform slump test that was put in place at a 5 slump.</p> <p>Shamrock was onsite to receive materials and meet with the electrician about starting on Monday.</p>
<b>Friday</b>							
6/15/12	CDM Constructors Inc.	00069					no work at site
<b>Saturday</b>							
6/16/12	CDM Constructors Inc.	00070					no work at site
<b>Sunday</b>							
6/17/12	CDM Constructors Inc.	00071					no work at site
<b>Monday</b>							
6/18/12	CDM Constructors Inc.	00072	60-65	Clear & Sunny	00-10	None	<p>Shamrock started trenching for the temp. sensor installation and their electric sub arrived onsite to start mounting the explosion proof box and stubbing conduit up for the pad location and data logger box.</p> <p>P&amp;J continued to haulspoils from the pond 10 east side bench excavation. the concrete crew started stripping forms from the headwall base and allowed final sections of pipe to be installed. once the pipes were set to grade the concrete crew started forming for the headwall and tying rebar for the upper section.</p>
<b>Tuesday</b>							
6/19/12	CDM Constructors Inc.	00073					<p>P&amp;J continues excavating and hauling spoils from the pond 10 area to the stockpile. also removed the barrel riser from pond 10. after removing the outlet pipe was approx 2' higher than design drawings and a call was made to K. Yang about the problem. he stated they will do some modeling and get back with me on a solution. some area's of the pond 10 slope is solid rock and we will need to get approval from the eng. to leave as is or have to pay P&amp;J for rock excavation.</p> <p>Shamrock finished trenching for the temp.sensor wires and installed the wires in the trenches as designed. the wire was placed and backfilling of the trash started with holes left open at the temp probe locations to test before final fill. Shamrocks concrete sub arrived and formed then poured the pad for the data logger panel rack. due to a late start and a late pour of concrete we were onsite until 8pm to allow the concrete to set enough to broom finish.</p>

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<b>Wednesday</b>							
6/20/12	CDM Constructors Inc.	00074	60-65	Clear & Sunny	00-10	None	<p>P&amp;J continued hauling the last of the spoils from the pond 10 slope excavation and dressing it up. some material was determined to be non rippable and was left in place for the time to allow the eng. to look at modeling and determine if the extra materials need to come out.</p> <p>P&amp;J concrete crew finished tying rebar and forming the headwall structure and concrete was poured at 1400. P&amp;J started excavating channels 12.3 and 12.4 and hauling spoils to the stockpile.</p> <p>Shamrock continued to backfill the temp sensor wires and cover with common fill in the areas other than the temp sensor location. their electric sub pulled the wire and made the terminations in the explosion proof box, mounted the rack and data logger panel on the concrete pad poured yesterday and started the conduit installation between the control panel and data logger for 120 volt power.</p>
<b>Thursday</b>							
6/21/12	CDM Constructors Inc.	00075	55-60	Clear & Sunny	00-10	None	<p>P&amp;J concrete crew finished the headwall structure at pond 12 outlet. All honeycombs were repaired and backfilling in the area will begin tomorrow. Part of the P&amp;J crew continued the piping to the stand pipe and tried to install the stand pipe. after erecting the stand pipe it was discovered the angle of the outlet of the stand pipe was wrong and it had to be taken down and sent back for repairs.</p> <p>Shamrock excavated for the east and west tie in points at the bottom of the slope and finished the trench to those locations. trash was excavated and hauled to the active face and clay bedding was installed. Shamrocks electrical sub finished the installation of the temp sensor data logger panel and made all wire termination. training for Buncombe County employees will be next week on Thursday the 28th of June. At the same time the temp sensors will be tested and all seal offs and temp probe boxes will be sealed per the spec's</p>
<b>Friday</b>							
6/22/12	CDM Constructors Inc.	00076	55-60	Clear & Sunny	00-10	None	<p>Shamrock had 2 guy's onsite removing the valves that were installed with the wrong seats and extending the 10" and 6" piping down slope to the valve location that is up stream of the tie in points.</p> <p>P&amp;J worked on the channel 10.2A. and road grading of the gravel road between channel 12.1A and 10.2A. P&amp;J also started the earthen embankment fill for pond 12 and backfilling and compaction behind the headwall for the pond 12 outlet pipe. rip rap protection at the outlet of pond 12 headwall area was installed.</p>
<b>Saturday</b>							
6/23/12	CDM Constructors Inc.	00077	60-65	Clear & Sunny	00-10	None	<p>P&amp;J was onsite filling the pond 12 embankment with fill materials from the cell 6 stock pile, compacting and grading the slopes of the pond 12 embankments. P&amp;J left site at 1530</p> <p>Shamrock had a 2 man crew show up about 0800 and worked for about an hour, backfilling approx 40' of trench over the west side tie in piping that was extended yesterday and installing marking tape. they left site approx 0915</p>
<b>Sunday</b>							
6/24/12	CDM Constructors Inc.	00078					no work at site

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<b>Monday</b>							
6/25/12	CDM Constructors Inc.	00079	60-65	Clear & Sunny	00-10	None	<p>P&amp;J continued preparing the sub grade for gravel installation on the access road west of pond 12. also set yard inlets 2&amp;3 and fitted the connection pipes that connect to the outlet at the headwalls.</p> <p>Shamrock attempted to make the 10" to 24" gas line tie in at the west tie in point. the electrofusion branch saddle was not heating the way it should for a proper fusion. the supplier was contacted and had some suggestions of what to try to get a good burn. the valve was installed upstream of the tie in point and closed and tape was put over the joint of the fusion saddle so the genset could be restarted for the night.</p> <p>Jet clean crew was onsite jetting the HIT lines today and completed by end of the day. the supervisor commented how well the jetting went due to no clogs or a lot of materials in the pipes being jetted.</p>
<b>Tuesday</b>							
6/26/12	CDM Constructors Inc.	00080	60-65	Clear & Sunny	00-10	None	<p>Shamrock continued working on the west side tie in points for the 6 and 10 to 24" tie in's. it was determined that the electro fusion processor used yesterday wasn't working properly and a new processor was sent. Buncombe County turned on a pump to help shamrock identify the force main from the leachate recirc.line but the wrong line was identified and tied into. at approx 1730 a pump kicked on and flooded the area. the pump was turned off and the lechate that was spilled was pumped into a tank and hauled to the top of the hill. a splice was fused back into the area where the line was tie into wrong and Shamrock left site at 1830.</p> <p>P&amp;J continued working on roadway sub grade prep and started subgrade prep for the fabri form ditch. P&amp;J bricked and mortared around the piping coming out of yard inlet 2 and 3 that was installed yesterday.</p>
<b>Wednesday</b>							
6/27/12	CDM Constructors Inc.	00081	50-55	Clear & Sunny	00-10	None	<p>P&amp;J continue working on the channel 10.2 C excavation and grading the sub grade for the asphalt road and gravel road subgrade. P&amp;J also started excavation for channel 15 at pond 11.</p> <p>Shamrock recieved an extrusion fusion gun and ran a bead around the 24" to 12" electrofusion branch saddle to ensure a good seal due to the problems with the processor yesterday. the west side tie in for LR was made and then moved to the eastside tie in points to start. the genset was shut down at 1530 and the 24" tie in point was opened. the branch saddle was installed and fused to the pipe with no problems. the east side tie in was also made on the LR line and Shamrock left site at 1830</p>

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<b>Thursday</b>							
6/28/12	CDM Constructors Inc.	00082	55-60	Clear & Sunny	00-10	None	<p>P&amp;J continued some grading on the channel 10.2 C and channel 15. started looking at the placement of pipe 5 and smart ditch lay out and intersection. continued roadway sub grade work,backfilled around yard inlets 2&amp;3 and watered roadways for dust control</p> <p>Shamrock made the tie in of the new valve approved for the location at the eastside tie in point on the forcemain line. Shamrock also used P&amp;J's water truck and flushed the lines going down the slope out until the water was clear. a small amount of sediment was removed and the valves were reinstalled by end of day. we shut down the genset to allow gas to build to a positive pressure in the lines and applied soapy water to the 24" pipe tie in points and no bubbles were found. there were some concerns of there being a leak due to the OX% being higher at the GAC of the conditioning skid. no leaks were found at the tie in points or valves un stream of the tie in. a pressure check of the lines on Monday will determine if the valves are seated properly to rule out that cause of high Ox %.</p>
<b>Friday</b>							
6/29/12	CDM Constructors Inc.	00083					no work at site
<b>Saturday</b>							
6/30/12	CDM Constructors Inc.	00084					no work at site
<b>Sunday</b>							
7/1/12	CDM Constructors Inc.	00085					no work at site
<b>Monday</b>							
7/2/12	CDM Constructors Inc.	00086	55-60	Clear & Sunny	00-10	None	<p>P&amp;J onsite starting to install rip rap in channels 12.3 and 12.4. a slow start this morning due to 1 and 4/10ths inch of rain over night. part of the morning was used to get roads bladed off to allow delivery of the rip rap. some grading started on the 20ft road at the entrance to the C&amp;D landfill entrance. the road alignment was changed a little to allow the road to be constructed using the current roads alignment.</p> <p>Shamrock was onsite trying to air test with no luck. the landfill slope was wet and hindered movement. after several attempt for a air test Shamrock left site to retrieve some fittings and materials needed to attempt again tomorrow.</p>
<b>Tuesday</b>							
7/3/12	CDM Constructors Inc.	00087	60-65	Clear & Sunny	00-10	None	<p>P&amp;J continued and finished installing rip rap in channels 12.3 and 12.4. also started subgrade work for 20' wide roads leading to current C&amp;D landfill area and grading in channel 10.1</p> <p>Shamrock continued trying to perform air test against ferco caps with no luck. Shamrock also started installing the stem risers for the valves that have been installed.</p>

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<b>Wednesday</b>							
7/4/12	CDM Constructors Inc.	00088	60-65	Clear & Sunny	00-10	None	<p>P&amp;J started installing pipe 5 at the new location approved by the eng's to allow for construction of the channel below the radio tower. both pipes were installed and compacted around by COB. also continued work on the subgrade of the access road leading to the current C&amp;D landfill area in prep for stone installation tomorrow. P&amp;J also graded the subgrade of pond 10 access road for stone placement to begin.</p> <p>No work by Shamrock field crew today</p>
<b>Thursday</b>							
7/5/12	CDM Constructors Inc.	00089	60-65	Clear & Sunny	00-10	None	<p>P&amp;J started installation of ABC stone on the access road to the current C&amp;D landfill area. By the end of the day they had installed the geogrid and first layer of stone to the intersection at the beginning of channel 10.2 A. P&amp;J also installed rip rap at the inlet and outlet of pipe 5 and installed the lid portions of the yard inlet 2 and 3. they cleaned out channel 10.2C of the silt washed down the slope from Sundays nights rain to prep the area for fabri form installation to begin Monday the 10th of July. Expected rain storm tonight and precautions were taken to minimize damage.</p> <p>Shamrock was onsite attempting to pressure test the trap line piping and excavating for the trap line tie in behind the block wall. No pressure test timing was started due to pressure drop. Shamrocks PM was onsite to try and find the problem and stated he will return tomorrow with a bigger air compressor to help increase the pressure and maybe be able to hear the air going thru a valve that is not seated or a small hole in a weld or flanged connection.</p>
<b>Friday</b>							
7/6/12	CDM Constructors Inc.	00090	60-65	Clear & Sunny	00-10	None	<p>P&amp;J onsite continuing to install ABC stone. geo grid and stone placement started about 0900 on the west end of the pond 11 access road back toward pond 12 earthen embankment. P&amp;J also started installing rip rap into Channel12.1A.</p> <p>Shamrock onsite and moved from air testing the trap lines to air testing the LR and Gas lines on the west side piping from HIT6 A and B. the test on both passed with pressure gaining from 10psi at start of test to approx 10.4 at the end of 1 hour. pressure test logs were filled out and signed by CDM as passing test. Shamrock then moved to air test the LR and Gas lines from HIT6 C,D and E to the valves at the tie in points.</p>

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<b>Saturday</b>							
7/7/12	CDM Constructors Inc.	00091	65-70	Clear & Sunny	00-10	None	<p>Shamrock continued working on air test of the east side LR and gas piping to the header tie in point valves. a valve on the LR line at the HIT-E head pipe was causing the pressure loss . It was determined that the O ring in the true union valve had been pinched and it was fixed allowing the air test to complete. The Gas piping was tested next and the leaks that were found were on the fernco caps they were trying to test against. the caps were replaced with weld on flanges and blinds were installed on the flanges allowing the test to complete with no pressure loss. Shamrock also installed filter fabric and riprap back into the stormwater ditch that had been removed for tie in pits.</p> <p>P&amp;J continued installing ABC stone on the roadway for the current C&amp;D landfill and the pond 11 access road west of the pond 12 earthen embankment. P&amp;J also started digging some smart ditch trench for placement on Monday. A template of the ditch was made and used for excavation of the smart ditch channel and appears to be working well. Prep work was started in the area's that will be lined with fabri form and P&amp;J fabri form contractor is scheduled to be onsite Monday.</p>
<b>Sunday</b>							
7/8/12	CDM Constructors Inc.	00092					no work at site
<b>Monday</b>							
7/9/12	CDM Constructors Inc.	00093	65-70	Clear & Sunny	00-10	None	<p>Shamrock continued pressure testing They started on the trap lines and failed the first test. after investigation they found a bad weld about 50 foot behind the tie in point. that area was excavated and the repair was made. the line was then recharged to 12 PSI bleed back down to 10 PSI and a retest was started at 1720. at 1820 the pressure was still at 10 and the last segment of piping passed. Shamrock then made the tie in behind the wall as suggested by Buncombe County and started adjusting the stem extensions on the valves. after looking at the stems it was determined the wrong stems had been ordered for the butterfly valves and new stems were ordered and should arrive Wednesday for installation.</p> <p>P&amp;J had a rep from smart ditch onsite to oversee proper installation of the smart ditch product. most of the crew worked on that for most of the day. approx. 1700 P&amp;J moved a excavator to start the trench for pipe 3 and yard inlet 1 installation and continued working on it until 1915. P&amp;J fabri form sub was onsite to start the installation and lay out with plans to pump tomorrow. some subgrade work was done on the pond 12 access road to prep for ABC stone placement tomorrow.</p>

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<b>Tuesday</b>							
7/10/12	CDM Constructors Inc.	00094	65-70	Overcast	00-10	Rain	<p>P&amp;J set yard inlet 1 and started piping pipe number 3. Also started installation of the ABC stone base from the end of the smart ditch down toward the pond 12 embankment. P&amp;J fabri form sub was onsite to install the fabri form channels. by the end of the day the fabri form was installed at channel 15 and the piping at pipe3 was completed. the top was set on the yard inlet and riprap was installed around yard inlet 1</p> <p>Shamrock had 1 man onsite cutting the caps off that were used for pressure test and started valve stem extensions on the ball valves for LR lines. Shamrock started grading activities on the side slope and about 1700 broke a pipe at the west side LR tie in piping. Leachate was flowing into the stormwater ditch. I had shamrock dig a sump down to the gravel pack on top of the liner to allow for the leachate to drain back into the collection system. it was determined after excavating the break that the pipe was not bedded properly when it was backfilled and when the dozer got on top of the area for grading it pulled apart at a weld. proper materials were not used as well causing problem. A lot of rocks were put in the area for backfill and should have been common fill from the stock pile above. This area was backfilled by Shamrocks PM on the 4th of July when no field crew was onsite to assist in backfilling and compaction.</p>
<b>Wednesday</b>							
7/11/12	CDM Constructors Inc.	00095	60-65	Mstly Cloudy	00-10	Rain	<p>Shamrock arrived onsite and prep the area of the broken pipe that was hit yesterday for repair. once the repair was made we charged the line with leachate and checked for leaks with Buncombe County. No leaks were found on the repaired section of pipe and Shamrock left site approx 1500 due to rain.</p> <p>P&amp;J removed the temp gravel entrance and installed the culvert crossing at pond 10 access road and backfilled. Once the culvert was installed geo grid was rolled out and ABC stone placement started in the area. P&amp;J fabri form sub was onsite installing the fabri form in channel 10.2C. P&amp;J used a roller and the rain to try and reach the specified compaction of 100% modified on the ABC stone that has already been put in place. some water diversion were put in place and they left site approx 1600</p>
<b>Thursday</b>							
7/12/12	CDM Constructors Inc.	00096	60-65	Mstly Cloudy	00-10	Rain	no production work was performed onsite due to 2" of rain yesterday and continued rains today.
<b>Friday</b>							
7/13/12	CDM Constructors Inc.	00097					no work at site
<b>Saturday</b>							
7/14/12	CDM Constructors Inc.	00098					no work at site
<b>Sunday</b>							
7/15/12	CDM Constructors Inc.	00099					no work at site

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<b>Monday</b>							
7/16/12	CDM Constructors Inc.	00100	65-70	Clear & Sunny	00-10	None	<p>P&amp;J continued and completed first lift of ABC stone to pond 10 and started dewatering pond 10 for riser installation. started the installation of the riser at pond 12 and continued placement of the ABC stone down the access road to pond 12.</p> <p>Shamrock started some rework at my urging and excavated the east tie in point to backfill the area properly and remove any large stones that were buried during the improper backfilling that took place on the 4th of July. tried to install the proper riser stems for the 6" butterfly valves but the stems were made to short and more had to be ordered. located and exposed the faulty temp sensor for replacement</p>
<b>Tuesday</b>							
7/17/12	CDM Constructors Inc.	00101	65-70	Clear & Sunny	00-10	None	<p>P&amp;J poured the concrete base at pond 12 riser pipe and continued to dewater pond 10 for the riser placement. the riser was set at pond 10 and the concrete base and the collar for pond 12 riser connection was poured. some material was excavated from channel 10.2 A and hauled to the pond 12 south slope area for placement.</p> <p>Shamrock was onsite and continued site restorations and installation of the well heads. the well head connections were the wrong ones and the submittal was reviewed. the Eng. approved with comments of provide the info for the compression fittings and no resubmittal was submitted by Shamrock. I informed the PM that the ferco fitting provided by Shamrock was not meeting spec's or what were on the drawings. He stated he would be onsite Tomorrow to investigate.</p>
<b>Wednesday</b>							
7/18/12	CDM Constructors Inc.	00102	65-70	Clear & Sunny	00-10	None	<p>P&amp;J started the installation of the baffles at pond 10, continued installing and compacting ABC stone, poured the concrete collar around the pond 10 riser connection, started cutting in channel 12.2 and started filling the south slope of pond 12.</p> <p>Shamrock addressed some concerns of Kristy Smith of Buncombe County with silt being in the stormwater ditch and finished dressing up the work area for the seeders to start today. By COB today the seeding was done and Shamrocks field crew demobed from site. the PM has stated he will return to install the proper well heads and install the seton style letters on the HIT well heads and stencil paint the wording on the valve operator extensions.</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Thursday</b>							
7/19/12	CDM Constructors Inc.	00103	65-70	Clear & Sunny	00-10	None	<p>P&amp;J continued ABC stone installation of the second lift in area's and installing the first lift on the north side of the current C&amp;D perimeter rd. also continued filling the pond 12 south slope with spoils that was scraped from the new C&amp;D fill area to minimize the loss of air space for Buncombe County. the south slope was completed today to the 1970 elevation.</p> <p>Shamrocks site PM arrived today and painted the words " GAS " on the blue valve extension risers and "LEACHATE" on the orange risers. I informed him that he had the wording backwards and he stated he would return Monday with everything needed to correct the problem and complete the job. I also reminded him he needed to provide a Handheld Digital Manometer per note 2 on sheet D-2 of the drawings to complete the job. Shamrocks electrician ( Via Electric) was onsite and replaced the faulty temp sensor. Currently the sensor is reading correct and will be left uncovered for a couple days to ensure it continues to read properly before covering</p>
<b>Friday</b>							
7/20/12	CDM Constructors Inc.	00104	65-70	Mstly Cloudy	00-10	Drizzle	<p>P&amp;J continued second lift of ABC stone in various places around the job and compacting. Also installed the porous baffles and skimmer in pond 12 and the skimmer in pond 10. also reinstalled the silt gauge that was removed from the demucking of pond 10 and started regrading the pond 10 slope to prep the area for seeding.</p>
<b>Saturday</b>							
7/21/12	CDM Constructors Inc.	00105	65-70	Clear & Sunny	00-10	None	<p>installed stone on the road south of the maintance building and wetting, grading and compacting. started channel 12.1A north of the new pipe 5 location. continued fixing some of the rain damaged areas in prep for seeding that should take place next week.</p>
<b>Sunday</b>							
7/22/12	CDM Constructors Inc.	00106					no work at site
<b>Monday</b>							
7/23/12	CDM Constructors Inc.	00107	70-75	Clear & Sunny	00-10	None	<p>P&amp;J tracked and compacted slope areas to remove rain washes and prepare for seeding to begin tomorrow, removed silt from sed pond 11 and reinstalled the porous baffles into pond 11.</p> <p>no work by Shamrock</p>
<b>Tuesday</b>							
7/24/12	CDM Constructors Inc.	00108	70-75	Clear & Sunny	00-10	None	<p>P&amp;J started excavating for channel 11.2 and attempted to start the gabion install. after breaking the bundle they found that the supplier didn't ship all materials and stopped channel excavation until materials arrived. P&amp;J moved to painting and installing Limits of Waste markers.</p> <p>P&amp;J seeder started today seeding and strawing the C&amp;D area and along the roadways of pond 12 access roads</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Wednesday</b>							
7/25/12	CDM Constructors Inc.	00109	60-65	Prt Cloudy	00-10	Rain	<p>P&amp;J finished installation of the Limits of Waste markers and started cleaning silt out of the rip rap ditches that had washed in before any erosion control was installed, dressing up road edges at the pond 10 area to allow Buncombe County access to Sed ponds for sampling and started back on gabion ditch installation.</p> <p>Shamrock's site PM was onsite to fix the miss labled gas and leachate valve extensions and install the proper compression fittings at the HIT well heads. also the Seton style 2" letters to identify the hit line were installed.</p>
<b>Thursday</b>							
7/26/12	CDM Constructors Inc.	00110	70-75	Clear & Sunny	00-10	None	<p>P&amp;J continued working on the channel 11.2 and taking out approx 50ft of the ABC stone road accessing pond 12 due to cracking and softness. P&amp;J claims that the materials were bad in that area and a rep from the provider is coming out to look at the excavated materials.</p>
<b>Friday</b>							
7/27/12	CDM Constructors Inc.	00111					no work at site
<b>Saturday</b>							
7/28/12	CDM Constructors Inc.	00112					no work at site
<b>Sunday</b>							
7/29/12	CDM Constructors Inc.	00113					no work at site
<b>Monday</b>							
7/30/12	CDM Constructors Inc.	00114	70-75	Clear & Sunny	00-10	None	<p>P&amp;J continued working on channel 11.2 . Progress was slow due to assembly of the gabions and area constraints.</p> <p>P&amp;J seeding contractor was onsite today to finish the seeding of the area's disturbed during constuction. The pond 10 area and the C&amp;D area was completed by the end of the day and seeders demobed.</p> <p>P&amp;J guardrail subs were onsite starting the installation of the guardrail on the access road to pond 12.</p>
<b>Tuesday</b>							
7/31/12	CDM Constructors Inc.	00115	65-70	Mstly Cloudy	00-10	Rain	<p>P&amp;J's work today was limited to assembly of some gabion baskets. yesterday's and this mornings rains caused no excavation of the ditches and saturated soils prevented the repair of slopes damaged in yesterdays rain event.</p>
<b>Wednesday</b>							
8/1/12	CDM Constructors Inc.	00116	70-75	Clear & Sunny	00-10	None	<p>P&amp;J continued working on channel 11.2. due to weather Monday and Tuesday repair of the washed out slopes couldn't start.</p>

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Thursday</b>							
8/2/12	CDM Constructors Inc.	00117	70-75	Clear & Sunny	00-10	None	P&J continued working on channel 11.2. P&J started to walk the rain washes out of the slopes but the soil was to wet from Monday and Tuesdays rain events.  I spoke with Chad Keelan about as built drawing and close out doc's and he stated we should get them today or early tomorrow.
<b>Friday</b>							
8/3/12	CDM Constructors Inc.	00118	65-70	Clear & Sunny	00-10	None	P&J was onsite continuing the installation of the gabion basket lined channel and attempting to track the rain rivulets out of the slopes to prep them for reseeding.  shamrock onsite to make a repair on a valve
<b>Saturday</b>							
8/4/12	CDM Constructors Inc.	00119	65-70	Overcast	00-10	Misty	P&J continued working on gabion basket lined channel.
<b>Sunday</b>							
8/5/12	CDM Constructors Inc.	00120					no work at site
<b>Monday</b>							
8/6/12	CDM Constructors Inc.	00121	65-70	Prt Cloudy	00-10	Rain	P&J continued working on channel 11.2. rain started and stopped production approx. 1730
<b>Tuesday</b>							
8/7/12	CDM Constructors Inc.	00122	65-70	Clear	00-10	None	P&J finished channel 11.2 gabion lined ditch and started excavation and grading on channel 11.1
<b>Wednesday</b>							
8/8/12	CDM Constructors Inc.	00123	65-70	Clear & Sunny	00-10	None	P&J continued excavation of channel 11.1 and fixing slopes that were damaged in Monday evenings rain event. By COB the channel 11.1 was stopped to allow access for the seeding contractor in that area and will complete after seeding is completed. P&J also fixed washed ditches to prep for seeding and ECB to be reinstalled in those area's, pumped down pond 12 and 10 to start cleaning out the silt that has washed into them since being demucked.
<b>Thursday</b>							
8/9/12	CDM Constructors Inc.	00124					P&J continued pumping down pond 10 and removing dirt that washed from the slope into the pond. the dirt was placed back on the slope and repair of the rain damaged area's of the pond 10 slope was started.
<b>Friday</b>							
8/10/12	CDM Constructors Inc.	00125					no work at site
<b>Saturday</b>							
8/11/12	CDM Constructors Inc.	00126					no work at site
<b>Sunday</b>							
8/12/12	CDM Constructors Inc.	00127					no work at site

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Monday</b>							
8/13/12	CDM Constructors Inc.	00128	80-85	Clear & Sunny	00-10	None	P&J Pond 12 - Remove silt from bottom of pond. dress up erosion wash outs areas around pond and hydro seed Pond 10 - Pump water from pond and dress up erosion wash outs Demobilize office trailer.
<b>Tuesday</b>							
8/14/12	CDM Constructors Inc.	00129	65-70	Prt Cloudy	00-10	Rain	P&J Pond 10 - Dewater and remove silt from bottom. Stock pile silt on bench around pond. Rotate skimmer 180 degrees. Hydro seed slopes Pond 11 - Start dewatering Pond 12 - Hydro seed slopes Channel 11.2 - Hydro seed Channel 12.1 A&B - Hydro seed Channel 10.2C - Hydro seed Pictuers to be loaded by Dave
<b>Wednesday</b>							
8/15/12	CDM Constructors Inc.	00130	75-80	Clear	00-10	None	P&J Pond 11 - Dewater and remove silt from pond bottom
<b>Thursday</b>							
8/16/12	CDM Constructors Inc.	00131	75-80	Clear	00-10	None	P&J Pond 11 - Remove silt from pond bottom and replace 3 porous baffles. Demoblize equipment Jerry with the county signed off on all punch list items except # 6 install guard rail.
<b>Friday</b>							
8/17/12	CDM Constructors Inc.	00132	65-70	Clear	00-10	None	P&J Pond 11 - Final grade benches and ramp. Demobilize equipment.
<b>Saturday</b>							
8/18/12	CDM Constructors Inc.	00133					no work at site
<b>Sunday</b>							
8/19/12	CDM Constructors Inc.	00134					no work at site
<b>Monday</b>							
8/20/12	CDM Constructors Inc.	00135					no work at site
<b>Tuesday</b>							
8/21/12	CDM Constructors Inc.	00136					no work at site
<b>Wednesday</b>							
8/22/12	CDM Constructors Inc.	00137					no work at site
<b>Thursday</b>							
8/23/12	CDM Constructors Inc.	00138					no work at site
<b>Friday</b>							
8/24/12	CDM Constructors Inc.	00139					no work at site

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<b>Saturday</b>							
8/25/12	CDM Constructors Inc.	00140					no work at site
<b>Sunday</b>							
8/26/12	CDM Constructors Inc.	00141					no work at site
<b>Monday</b>							
8/27/12	CDM Constructors Inc.	00142					no work at site
<b>Tuesday</b>							
8/28/12	CDM Constructors Inc.	00143					no work at site
<b>Wednesday</b>							
8/29/12	CDM Constructors Inc.	00144					no work at site
<b>Thursday</b>							
8/30/12	CDM Constructors Inc.	00145					no work at site
<b>Friday</b>							
8/31/12	CDM Constructors Inc.	00146					no work at site
<b>Saturday</b>							
9/1/12	CDM Constructors Inc.	00147					no work at site
<b>Sunday</b>							
9/2/12	CDM Constructors Inc.	00148					no work at site
<b>Monday</b>							
9/3/12	CDM Constructors Inc.	00149					no work at site
<b>Tuesday</b>							
9/4/12	CDM Constructors Inc.	00150					no work at site
<b>Wednesday</b>							
9/5/12	CDM Constructors Inc.	00151					no work at site
<b>Thursday</b>							
9/6/12	CDM Constructors Inc.	00152					no work at site
<b>Friday</b>							
9/7/12	CDM Constructors Inc.	00153	60-65	Clear & Sunny	00-10	None	P&J's guardrail sub contractor arrived today and started the installation of the guardrail. Installation was agreed upon by P&J site super and myself and started along the pond 12 access road at the curve. 385 foot was installed today down to the embankment crossing
<b>Saturday</b>							
9/8/12	CDM Constructors Inc.	00154	60-65	Mstly Cloudy	00-10	Rain	Guardrail subs were back onsite to continue the installation of the guardrail from the pond 12 embankment along the pond 11 access road. Rain started about 1100 and stopped work by P&J's sub for the day. 300' of guardrail was installed.

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Date	Company	Number	Temperature	Sky	Wind	Precipitation	Activity
<b>Sunday</b>							
9/9/12	CDM Constructors Inc.	00155					no work at site
<b>Monday</b>							
9/10/12	CDM Constructors Inc.	00156	50-55	Clear	00-10	None	P&J's Guardrail subs were onsite today and completed the installation of the guardrail along the pond 11 access road. this should complete the onsite work for P&J
<b>Tuesday</b>							
9/11/12	CDM Constructors Inc.	00157					no work at site
<b>Wednesday</b>							
9/12/12	CDM Constructors Inc.	00158					no work at site
<b>Thursday</b>							
9/13/12	CDM Constructors Inc.	00159					no work at site
<b>Friday</b>							
9/14/12	CDM Constructors Inc.	00160					no work at site
<b>Saturday</b>							
9/15/12	CDM Constructors Inc.	00161					no work at site
<b>Sunday</b>							
9/16/12	CDM Constructors Inc.	00162					no work at site
<b>Monday</b>							
9/17/12	CDM Constructors Inc.	00163	60-65	Prt Cloudy	10-20	None	Shamrock crew arrived mid day to start cleanout of the stormwater ditch that was filled from slope washouts. The cell 6 wall was cleaned behind and the spoils were placed back on the slope.
<b>Tuesday</b>							
9/18/12	CDM Constructors Inc.	00164	60-65	Mstly Cloudy	10-20	Rain	no work at site by Shamrocks field crew due to 2" rain overnight.
<b>Wednesday</b>							
9/19/12	CDM Constructors Inc.	00165	50-55	Prt Cloudy	00-10	None	Shamrocks field crew arrived and continued working on the stormwater ditch cleanout. They moved the rip rap around and placed it back atop of the mud that had washed into the ditch without cleaning the silt out. After speaking with the supervisor and showing them what was expected to be done they continued to cleanout the ditch properly.
<b>Thursday</b>							
9/20/12	CDM Constructors Inc.	00166	50-55	Prt Cloudy	00-10	None	Shamrocks crew continued to cleanout the stormwater ditch. The washed materials were excavated from the ditch and hauled to the top of the cell 6 area. Shamrocks seed sub also arrived today and reseeded the area and installed straw over top. Jerry Mears checked the area once Shamrock was finished and stated the job was good and agreed that the cleanout was complete. Shamrock also provided the dust caps that were needed to complete their punchlist. They dust caps were turned over to Aaron Mckenzie of Buncombe County.

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<b>Friday</b>							
9/21/12	CDM Constructors Inc.	00167					no work at site
<b>Saturday</b>							
9/22/12	CDM Constructors Inc.	00168					no work at site
<b>Sunday</b>							
9/23/12	CDM Constructors Inc.	00169					no work at site
<b>Monday</b>							
9/24/12	CDM Constructors Inc.	00170					no work at site
<b>Tuesday</b>							
9/25/12	CDM Constructors Inc.	00171					no work at site
<b>Wednesday</b>							
9/26/12	CDM Constructors Inc.	00172					no work at site
<b>Thursday</b>							
9/27/12	CDM Constructors Inc.	00173					no work at site
<b>Friday</b>							
9/28/12	CDM Constructors Inc.	00174					no work at site
<b>Saturday</b>							
9/29/12	CDM Constructors Inc.	00175					no work at site
<b>Sunday</b>							
9/30/12	CDM Constructors Inc.	00176					no work at site
<b>Monday</b>							
10/1/12	CDM Constructors Inc.	00177					no work at site
<b>Tuesday</b>							
10/2/12	CDM Constructors Inc.	00178	50-55	Mstly Cloudy	10-20	Rain	P&J was onsite with 3 men to replace the skimmers at pond 10 and 12 due to faulty product. The pond 10 skimmer was replaced and then rain started which caused a delay in progress. P&J rented a small kyack to paddle out and cut the defective skimmer from pond 12 and allowed sometime for the pond to drain. The new skimmer was then installed and both seem to be working as designed.

**Construction Certification**

**Appendix C**  
**Construction Photographs**



Clearing Phase 5/Sediment Pond 12 Area



Shaping Phase 5 Area and Access Road



Compaction of Access Road



Compacting Sediment Pond 12 Bottom



Stormwater Pipe Construction



Sediment Pond 12 Endwall Structure



Pouring Endwall



Completed Endwall



Completed Yard Inlet



Completed Phase 5 Area/Sediment Pond 12



Completed Phase 5 Area



**PHILLIPS & JORDAN, INC.**

Buncombe County C&D Landfill Ph 5-1 9-19-12

Completed Aerial