



# Ohio Department of Transportation

1980 West Broad Street, Columbus, Ohio 43223-1102

July 11, 2007

Mr. Albert P. Leonard, P.E.  
The Great Lakes Construction Co.  
2608 Great Lakes Way  
Hinckley, OH 44233-9590

Re: ODOT Project 584(04)  
Decision  
Claims: 02-040584-01 Drilled Shaft Number 19  
02-040584-02 Drilled Shaft Number 15

Dear Mr. Leonard:

Enclosed is the Director's Claims Board decision on the subject claims.

Under the terms of the contract, the Step 3 Director's Claims Board decision is the final step of the process and may not be appealed within the Department. You must either accept or reject this decision in writing within 30 calendar days of receipt.

Please contact me at (614) 466-3598 with any questions.

Respectfully,

A handwritten signature in cursive script, reading "William H. Lindenbaum".

William H. Lindenbaum, P.E., P.S.  
Chairman, Director's Claims Board Hearing Panel

copies sent via e-mail and post mail:

Director's Claims Board: Dave Holstein  
Director's Claims Board Hearing Panel: Bill Lindenbaum, Mark Kelsey, Tim McDonald  
District 2: Mike Gramza  
Claim File



**Director's Claims Board  
ODOT Project 584(04)**

**Claims: 02-040584-01 Drilled Shaft #19  
02-040584-02 Drilled Shaft #15**

*Decided July 11, 2007*

In accordance with the Dispute Resolution and Administrative Claim Process set forth in Change Order #36 executed on November 28, 2006, the Director's Claims Board Hearing Panel ("Panel") received written documentation from Great Lakes Construction Company ("Great Lakes" or "Contractor") on June 19, 2006 and then from ODOT District 2 on July 27, 2006. The Contractor also submitted additional written documentation on May 7, 2007.

The Panel was scheduled to hear oral presentations of the Contractor and the District relative to the subject issue on October 17, 2006 and again on May 15, 2007. However, both hearings were cancelled at the request of the Contractor. The Panel denied the Contractor's request for another re-scheduling of the hearing. This decision is being rendered based on a review of the documentation submitted by both the Contractor and the District.

**PROJECT DESCRIPTION:**

This project involves the rehabilitation of the Edison Bridge over Sandusky Bay. The work includes replacement of the existing deck, patching of the substructure, widening of the roadway, median lights and fender system repairs. The project was let on December 17, 2004 and awarded to Great Lakes on December 22, 2004 for \$17,505,919.30.

The Contractor subcontracted the drilled shafts to Toledo Caisson Corporation ("subcontractor").

**CLAIM BACKGROUND:**

The item of work in dispute is Item 524 – Drilled Shafts. Drilled shaft #19 was poured on July 22, 2005 and drilled shaft #15 was poured on July 28, 2005. Both shafts were placed by free-fall method. The parties have differing accounts of the circumstances surrounding the pours.

In a letter dated July 29, 2005, the District instructed the Contractor to "obtain the services of a specialist that can ascertain the condition of the shaft." After performing dynamic load testing and taking cores, the District determined drilled shaft #15 was acceptable and drilled shaft #19 was defective and the Contractor removed and replaced the work.

On September 1, 2005, the Contractor gave its early notice of a claim “for any and all costs associated with but not limited to testing, idle delay time, and unnecessary caisson remediation.” A Step 2 meeting was held on March 27, 2006 and the District denied the Contractor’s request in a written decision dated April 6, 2006.

The Contractor escalated the dispute to Step 3 and the dispute became a claim to be decided by the Director’s Claims Board.

**SUMMARY OF CONTRACTOR’S POSITION:**

Great Lakes asserts several arguments in support of its claim:

*Drilled Shaft #15*

1. “Toledo Caisson Corporation complied with the contract requirements and the installation procedure.”
2. “The inspector’s direction at the time was unclear as well as based upon false information.”
3. “At no time did any inspector and or the Project Engineer request that we suspend the work.”
4. The Contractor argues that since the shaft was tested and passed it should be compensated per C&MS 105.10.

*Drilled Shaft #19*

1. “The Contractor is bound by the C&MS to prosecute the work in conformance of the Contract Documents. The Ohio Department of Transportation is charged by the same documents to provide oversight and inspection of the work ensuring that it conforms to the Contract Documents.”
2. “...ODOT due to the lack of timely notification as well as false information requiring the testing of DS #19 has caused severe financial hardship...”

The Contractor requests additional compensation for the testing of drilled shaft #15 in the amount of \$108,533.53 plus legal fees, office overhead, and claim development fees. The Contractor also requests additional compensation for the testing, analysis, and subsequent replacement of drilled shaft #19 in the amount of \$309,946.27 plus legal fees, office overhead, and claim development fees.

**SUMMARY OF DISTRICT’S POSITION:**

The District maintains that Great Lakes is not entitled to additional compensation for the following reasons:

*Drilled Shaft #15*

1. The Contractor used a dry construction method even though the "...water was infiltrating the drilled shaft >36" per hour." This is a violation of the specification and the Contractor's Drilled Shaft Procedures.
2. "C&MS 105.10 is not applicable to the case...does not envision the Contractor's disregard for the specifications and the District personnel's direction."
3. "But for the Contractor's disregard of the specification requirements, the District's direction, and its own installation procedure, the work would not have been rendered defective and the Contractor would not have incurred damages resulting from such determination."

#### *Drilled Shaft #19*

1. "ODOT ordered the testing in accordance with C&MS 105.10..."
2. "DS19 cores broke at a minimum of 750 psi when the specification required a concrete strength of 4500psi."
3. "ODOT then directed the Contractor to supply an engineered analysis and repair procedure or remove the defective shaft in accordance with C&MS 105.03...TCC elected to remove the shaft."

### **DIRECTOR'S CLAIMS BOARD FINDINGS:**

#### **I. Facts**

In light of all the evidence presented, the Board concludes that the following facts are a true and accurate representation of the relevant events leading up to this dispute.

C&MS 524.04(A) provides:

**A. Dry Construction Method.** Use the dry construction method only at sites where the groundwater table and site conditions are suitable to allow construction of the shaft in a relatively dry excavation, and where the sides and bottom of the shaft remain stable without any caving, sloughing, or swelling and may be visually inspected before placing the concrete. The dry method consists of excavating the drilled shaft hole, removing accumulated water, and loose material from the excavation, and placing the shaft concrete in a relatively dry excavation. The rate of flow of water into the hole should not be more than 12 inches (300 mm) within a 1-hour period. Do not place the initial concrete if there is more than 3 inches (75 mm) of water in the bottom of the hole.

Further, the Contractor's Installation Procedure for Drilled Piers for this project included the following provision in the Concrete Placement section:

If the flow of water is more than 12" per hour or the Engineer determines that dewatering of the hole is impractical, concrete will be placed utilizing a tremie and concrete pump.

Drilled shaft #19 was placed using the free-fall method on July 22, 2005. The documentation indicates there were some problems with the concrete and that water

was entering the shaft. Based on the evidence submitted, the Board is unable to determine the rate at which the water was entering. ODOT's project personnel expressed a concern over the intrusion of water but did not direct the work to cease.

Drilled shaft #15 was placed using the free-fall method on July 28, 2005. The Contractor contends that it "calculated the water inflow to be less than 12" per hour, within specifications." The Contractor also contends that although there were several on-site discussions between its project manager and ODOT's Project Engineer and Inspectors regarding the placement of the concrete, it was never told to suspend placement of concrete. The Contractor provided affidavits dated mid-June 2006, nearly one year after the events at issue, in support of these contentions. On the other hand, the District contends that these discussions centered on it being necessary to use a tremie or pump since this shaft was wet. The District provided daily diaries, a C-95 incident form, and a video in support of these contentions. The best evidence in this case is that provided by the District since it is contemporaneous with the events and more detailed than that provided by the Contractor. Therefore, the Board finds that the water inflow was greater than 12" per hour. Further, the District instructed the Contractor to use a tremie or pump and the Contractor proceeded with the pour contrary to these instructions.

In a letter dated July 29, 2005, the District instructed the Contractor to obtain "the services of a specialist that can ascertain the condition of the shaft...include the in place strength of the concrete and the presence of voids within the shaft." The District approved the Contractor's proposal to utilize the services of GRL Engineers to perform dynamic load testing on the drilled shafts. The District also requested cores be taken along the entire length of each shaft and extend into the underlying rock.

After performing the dynamic load testing and taking cores, the District determined drilled shaft #19 was defective. C&MS 499.03(C) requires an average concrete compressive strength at 28 days of 4500 pounds per square inch for Class S. The Contractor elected to remove and replace this shaft. Several cores tested below this strength with the minimum strength being 750 psi.

The District accepted drilled shaft #15 as it was satisfied that the Contractor had proven that it would meet the intended design requirements.

## **II. Conclusions**

After careful review of the submitted documents, the Board determined the following to be significant findings relevant to the issue of entitlement:

### *Drilled Shaft #19*

1. First, the Board directs the Contractor to C&MS section 105.03 Conformity with Contract Documents which states "perform all Work and furnish all Materials in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements as shown on the Plans and as specified..."

2. C&MS 105.10 states “When directed by the Engineer, remove or uncover completed Work to allow inspection. After the Engineer’s inspection, restore the Work according to the requirements of the Contract Documents. If the inspected Work conformed to the requirements of the Contract Documents, the Department will pay for uncovering or removing and restoring the Work as Extra Work according to 109.05. If the inspected Work did not conform to the Contract Documents, the Department will not pay for uncovering or removing and restoring the Work.” Here, it was proven that the inspected Work (i.e., drilled shaft #19) did not meet the strength requirements and therefore did not conform to the Contract Documents. According to this specification, the Engineer is not responsible for paying for the testing.
3. C&MS 105.03 continues on to state “If the DCE determines the Work is not in reasonably close conformity with the Contract Documents and determines the Work is inferior or unsatisfactory, remove, replace, or otherwise correct the Work at no expense to the Department.” As discussed above, the drilled shaft was proven defective and the Contractor elected to remove and replace the drilled shaft. Therefore, under the Contract, this remedial work must be at no expense to the Department.
4. The Board notes that the compliance of the Contractor’s placement of the concrete and installation procedure on drilled shaft #19 is irrelevant.
5. Finally, C&MS 105.10 Inspection of Work stipulates that “the Department’s failure to identify defective work or material shall not, in any way, prevent later rejection when defective work or material is discovered...” Therefore, it is the Board’s conclusion that the Department did not accept the work, either expressly or impliedly.

#### *Drilled Shaft #15*

1. Based on the findings above, the Board concludes that the Contractor did not comply with the contract requirements nor its installation procedure on drilled shaft #15.
2. Further, since it was determined that the District did instruct the Contractor to use a tremie or pump and the Contractor proceeded with the pour contrary to these instructions, this drilled shaft would qualify as unauthorized work under C&MS 105.11. This specification section provides “Unauthorized Work is Work done contrary to the instructions of the Engineer, beyond the plan lines, or any extra work done without the Department’s permission. The Department will not pay for unauthorized Work. The Engineer may order the Contractor to remove or replace unauthorized Work at no expense to the Department.” Here, rather than order the work removed at no expense to the Department, the Engineer afforded the Contractor the opportunity to prove the shaft would function as intended. The Contractor was successful in proving that the shaft would function as intended and as a result was paid for the unauthorized work. Based on the circumstances, the Engineer was more than reasonable.

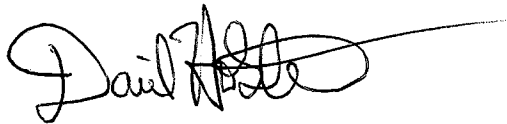
3. The Contractor bases its claim on C&MS 105.10 which states "When directed by the Engineer, remove or uncover completed Work to allow inspection. After the Engineer's inspection, restore the Work according to the requirements of the Contract Documents. If the inspected Work conformed to the requirements of the Contract Documents, the Department will pay for uncovering or removing and restoring the Work as Extra Work according to 109.05. If the inspected Work did not conform to the Contract Documents, the Department will not pay for uncovering or removing and restoring the Work." The Board concludes that this case is not governed by this specification section. Rather, it is outside the realm of the Contract as the Contract neither anticipates nor addresses those cases when the Contractor fails to comply with the contract requirements and disregards the owner's direction. Therefore, the Board must turn to the law to address the issue of responsibility. Based on the law, the Contractor is responsible for the costs associated with the testing because but for the Contractor's noncompliant work the testing would not have been performed.

Based on the aforementioned conclusions the Contractor has not proven that it is entitled to additional compensation.

**DAMAGES:**

Based upon the findings above, the Contractor is not entitled to reimbursement for any damages.

Submitted this 11th day of July, 2007.

A handwritten signature in black ink, appearing to read "David Holstein", with a long horizontal flourish extending to the right.

David Holstein, P.E.  
Acting Assistant Director, Highway Management