



**SPR Part 2 - State Fiscal Year 2016 Work Program
Research, Development and Technology Transfer**

Project Title: Evaluation of ODOT's Culvert Boring Process

Research Agency: Bowling Green State University

Researcher: Alan Atalah

Status: Active

State Job #: 134840/ 135014

RFP #: 2014-14

Start Date: December 2, 2013

End Date: August 1, 2015

Classification: Standard

Technical Lead: Mark Atkinson

Project Type: Maintenance

Abstract:

ODOT inspects and evaluates its culverts on a regular basis. From these evaluations culvert work orders are generated, and recommend needed repairs or complete replacement when necessary. Complete culvert replacements are the focus of this research. ODOT maintenance personnel currently review replacement work orders and generate a cost estimate to replace the culvert to include labor, material, and equipment costs (including the appropriate overhead rates). If the cost estimate is less than the legal limit to perform such work (established currently at \$50,000 by the ORC), then the work will be scheduled. If the cost estimate exceeds the legal limit, the work will be sold as a contract.

The conventional method utilized to replace a culvert involves closing the roadway, detouring traffic, excavating to remove the old culvert, and placing the new culvert. Two factors that are of major concern in this process include: replacing culverts under deep fills, and replacing culverts where large volumes of traffic are affected. Replacing a culvert under a deep fill adds significant cost and time to the project. In addition to increased costs, safety issues arise when working in deep excavations. User costs are the added costs experienced by the traveling public associated with the detour which is required when replacing culverts using the traditional method of excavation. The total user costs for any detour are driven by the volume of traffic, length of the detour, and the time in which the detour is in place.

This research will examine the cost effectiveness, safety and overall efficiency of culvert replacements using the jack and bore method versus the traditional method of excavation based on the depth of fill and user costs. Potential benefits include reduced costs, reduced noise, minimized traffic disruption, increased pedestrian safety, and fewer environmental impacts.



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

via Certified Mail

January 22, 2015

Dr. Michael Y. Ogawa
Vice President for Research & Economic Development
106 University Hall
Bowling Green, OH 43403

Re: ODOT Agreement No. 26053 "Evaluation of ODOT's Culvert Boring Process" by Dr. Alan Atalah

Dear Mr. Ogawa:

The Ohio Department of Transportation (ODOT) has been experiencing difficulty with the organizational structure of project deliverables under the subject agreement as delivered by Dr. Atalah. Various discussions have taken place in an effort to rectify the situation.

Strong concerns were raised during the review session held October 31, 2014. It became apparent that there was a lack of organizational communication of the information collected. The presentation brought serious concern to the technical panel about Dr. Atalah's ability to provide the deliverables as outlined on page 8 of the Phase II proposal dated August 8, 2013 (attached). Recommendations were provided and the technical panel requested a preliminary draft final report be submitted by January 9, 2014 to ensure that Dr. Atalah understood the recommendations that were provided before, during and after the review session.

Upon receipt of the preliminary draft final report, the technical panel expressed concerns regarding the structural integrity of the report.

- *"They fill up tables with data and jump from one installation type to the next, then to In-house versus contracting, then back. It's hard to follow and then the reader has to decipher the best alternative by going back and studying the tables anyway."*
- *"They still state their same preconceived ideas of why contracting is advantageous over in-house work. They say contractors are more efficient?? Even though none of their collected data confirms that. They say that contracting the work gives the contractor the risk and liability. The contractor has some risk, but if a problem arises, ODOT almost always compensates the contractor for any additional costs. Also, once the work is accepted by ODOT, the contractor has very little liability. I have tried to explain this to them several times, but they apparently do not understand how ODOT works?"*
- *"We have repeatedly asked for simplified tables or charts that the reader can quickly and easily decipher. I really don't think that it would be difficult to create 1 single table or matrix that shows which installation type to use for different situations. From the numbers that are in their report, it should be fairly simple to create 1 single table or matrix that shows whether In-House work or Contract work is most cost efficient."*

Exhibit 2

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In summary, the report needs to simplify the findings, and ensure that all statements have supported facts. The purpose of this letter is to advise you that Dr. Atalah has 30 days from receipt of this letter to provide a revised preliminary draft final report clearly providing the deliverables outlined on page 8 of the Phase II proposal dated August 8, 2013 (attached).

Should Bowling Green State University not provide a preliminary draft final report that addresses all the aforementioned concerns in a simplified, organizationally structured report, then ODOT reserves the right to terminate the contract. Consequences of failure to provide said report will result in the following:

- a. All project-related data and information collected during this project will be provided to the Department.
- b. Any work associated with this project will not be acknowledged by ODOT or Federal Highway Administration.

Thank you for your cooperation in this matter. We are available to speak with you the week of January 26th. Please contact Kelly Nye for call coordination at 614-644-8135 or research@dot.state.oh.us.

Sincerely,

Scott Phinney
Administrator, Statewide Planning and Research

cc: Dr. Alan Atalah



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via Certified Mail

March 10, 2015

Dr. Michael Y. Ogawa
Vice President for Research & Economic Development
106 University Hall
Bowling Green, OH 43403

Re: ODOT Agreement No. 26053 "Evaluation of ODOT's Culvert Boring Process" by Dr. Alan Atalah

Dear Mr. Ogawa:

I regret to inform you that ODOT has found Bowling Green State University's (BGSU) latest draft of the final report for the reference project unacceptable. The reasons for ODOT's findings have not changed from my previous letter to you dated January 22, 2015. We asked three technical experts review the document and they have come to the same conclusion independently. The report's organization is still difficult to follow, the many results are not supported by data, and the report contains contradictory statements.

Considering ODOT's previous attempts to rectify these concerns, I am hereby directing BGSU to suspend all work on the project. Additionally, BGSU is to compile copies of all materials gathered or generated for the project and submit them to ODOT. Electronic materials are to be copied onto the enclosed USB drive and submitted along with hard copy materials to: The Ohio Department of Transportation, Office of Statewide Planning & Research MS#3280, 1980 W Broad St, Columbus, OH 43223. These materials must be received by April 1, 2015. Your time in compiling and submitting the materials may be charged to the project and invoiced to ODOT. However, no other activities may be charged and no additional work may be performed until further directions are provided by the ODOT Office of Statewide Planning & Research.

In addition, Dr. Atalah and BGSU may not publish or release any of the project materials, nor information about the materials, to any third parties without express written consent from the ODOT Office of Statewide Planning & Research.

After receipt, ODOT will review the materials provided by BGSU to determine the best course of action, which may include contract termination. ODOT will contact you once a decision has been made. Until then, if you have any questions or require clarification of any of the directions found in this letter, please contact Kelly Nye at 614-644-8135 or research@dot.state.oh.us.

Respectfully,

A handwritten signature in black ink, appearing to read "Scott Phinney".

Scott Phinney
Administrator, Statewide Planning and Research

cc: Dr. Alan Atalah



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
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via Certified Mail

May 6, 2015

Dr. Michael Y. Ogawa
Vice President for Research & Economic Development
106 University Hall
Bowling Green, OH 43403

Re: ODOT Agreement No. 26053 "Evaluation of ODOT's Culvert Boring Process" by Dr. Alan Atalah

Dear Mr. Ogawa:

I regret to inform you that ODOT is cancelling the contract for this project between ODOT and Bowling Green State University's (BGSU). The most recent report received did not communicate a clear cost benefit analysis from the researcher. After further review it appears additional data from ODOT is still needed to properly perform a cost benefit analysis.

In Section XVII – Termination of the contract, of the agreement signed September 24, 2013, ODOT is giving BGSU thirty (30) days written notice of this contract cancellation. There was previous notice for BGSU to suspend all work on the project on March 10, 2015. ODOT is still expecting a limited final invoice including all work completed prior to March 10, 2015, time in gathering/converting data as requested by ODOT and reimbursement for the Denver airline tickets.

In addition, Dr. Atalah and BGSU may not publish or release any of the project materials, nor information about the materials, to any third parties without express written consent from the ODOT Office of Statewide Planning & Research.

If you have any questions or require clarification of any of the directions found in this letter, please contact Michelle Lucas at 614-644-8135 or research@dot.state.oh.us.

Respectfully,

Scott Phinney
Administrator, Statewide Planning and Research

cc: Dr. Alan Atalah

From: Alan Atalah <aatah@bgsu.edu>
Sent: Monday, March 07, 2016 12:33 PM
To: Rossi, Jeffrey
Subject: FW: Thank you for your professionalism

Prof. Alan Atalah, PhD, PE, ASCE Fellow

From: Alan Atalah

To: 'jeffery.Rossi@oig.state.oh.us' <jeffery.Rossi@oig.state.oh.us>
Subject: Thank you for your professionalism

When you called for the interview, my mind went to the direction of why the research was terminated or financial issues. I did not anticipate that it was related to erotic material on the thumb drive. After our meeting, I did not get a chance to look at the file that you pointed out because I have an accreditation self-study report that I had to finalize and give to the Provost office by last Friday.

During the weekend, the following thought crossed my mind. We are not living in the puritan era USA, Saudi Arabia, or Iran to make such a big issue because of a harmless erotic story. There got to be more in to it; specially with the questions about child abuse. So I checked the story, I got sick to my stomach and I could not finish it. At this point, I understood what is the heart of the issue.

I want to thank you for your professionalism because if I was in your shoes, I do not know if I would have been this professional with me. I have the opinion that the children abusers are the worst types of people or the worst ill people if you consider them sick. Part of our DNA (as human) is to care for our offspring; almost all animals take care of their young. Therefore, preying on the young is disgusting and disturbing. I cannot imagine my reaction if someone prey on any of my two granddaughters.

Now that I understand the issue, I am happy to do whatever it takes to assure you (and the state and the university) that I am not that kind of a person who would do anything awful like that. Thanks.

Prof. Alan Atalah, PhD, PE, ASCE Fellow
Associate Dean for Graduate Affairs, Faculty Affairs and Assessment



Bowling Green State University

College of Technology, Architecture and Applied Engineering

Construction Management Department, Bowling Green, OH 43403

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