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DEPARTMENT OF TRANSPORTATION
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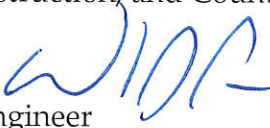
John R. Cooper
TRANSPORTATION DIRECTOR

September 30, 2016

Construction Information Memorandum No. 1 - 2016

TO: Region Engineers

ATTN: Area Operation, Construction, and County Transportation Engineers

FROM: Winston J. Powe, PE 
State Construction Engineer

RE: Drilled Shaft Tip Elevation Changes

When a contractor or subcontractor performing drilled shaft work encounters rock at an elevation different than shown on the plans, he should propose a change in the tip elevation. In an effort to have a consistent and expedited review process throughout the State, this CIM provides guidance regarding such changes.

Interstate, US, and State Projects

- 1) In the event the rock is encountered at a higher or lower elevation than the plan elevation, the drilled shaft contractor should propose a change by email to the Construction Bureau's Bridge Section, with a copy to the Project Manager and Area Construction Office (if the proposal is being made by a Subcontractor, the Contractor will also be copied).
- 2) Form C-32, *Drilled Shaft Modification Request* (copy attached), must be filled out completely and included as an attachment with the proposal. It is extremely important that the Form include a description of the rock socket and the results of the exploratory hole by description of material encountered (the description "satisfactory material" will not be acceptable).
- 3) The Construction Bureau will forward the proposal to the Bridge and M&T Bureaus for their review and recommendation.
- 4) If the proposal is determined to be acceptable, the Construction Bureau will provide email notification to the Area Construction Office with copies to the Project Manager, Contractor, and Subcontractor (when applicable).

5) Note: If the proposed change in approximate tip elevation is 2' or less, the review/approval can be made at the Area Construction Engineer level. The Area Construction Engineer will notify the Contractor and Subcontractor of the results of the review, with copies to the Construction, Bridge, and M&T Bureaus. However, if there are sinkholes in the vicinity, or if other unusual circumstances exist, the proposal must still be reviewed/approved at the Central Office level.

ATRP, County, and Municipal Projects

1) The review process will remain the same for all projects where the Bridge Bureau designed the bridge and the M&T Bureau or their Consultant prepared the bridge foundation report.

2) If either the bridge design or the bridge foundation report were prepared by an Engineer on behalf of the County or Municipality, the Contractor should work through the Project Manager and the Engineer of Record for review/approval of the proposed tip elevation changes. These proposals will not be handled by the Construction Bureau.

Other Guidance

The proposal reviewer must consider the following issues:

- Compare the request to the plans
- Compare the request to the Foundation Report
- Compare the request to the boring logs
- Verify the socket length is per plans and the condition of the socket
- Verify there is no seams, or voids within the socket and the socket is solid
- Verify the description for the exploratory hole and that it is good material (borings)

The guidance in this CIM will be incorporated into the Construction Manual at a later date.

Form C-32 is available on the "Construction Forms" Internet page (be sure to refresh the page using <Ctrl>+<F5>). It is accessible via:

- ALDOT Internet, Construction Bureau page, "Resources" section, "Construction Forms" link
- ALDOT Intranet, Construction Bureau page, "Forms" section, "Updated Construction Forms" link
- Direct link to Form C-32 - <http://www.dot.state.al.us/conweb/doc/Documents/C-32.pdf>

Please insure that your Project Managers are familiar with this CIM.

WJP/JLB/CSO/jlb

Attachment (Form C-32, Drilled Shaft Modification Request)

pc: Mr. John Lorentson, PE	Mr. Scott George, PE	Mr. Tim Colquett, PE
Mr. William Adams, PE	FHWA	CIM File
ABCA	ARBA	

FORM C-32 **ALABAMA DEPARTMENT OF TRANSPORTATION**
Created 09-2016 **DRILLED SHAFT MODIFICATION REQUEST**

Project Number		County	Area	Region
Bridge Station To Station		Bridge Identification Number		
Contractor		Inspector		
Date	Bent No. & Lane	Shaft No.	Diameter of Shaft (inches)	

Plan Information		Field Information	
Top of Ground (feet)		Actual Top of Ground (feet)	
Rock Elevation (feet)		Actual Rock Elevation (feet)	
Rock Description		Actual Rock Description	
Top of Rock Socket Elevation (feet)		Actual Top of Rock Socket Elevation (feet)	
Tip Elevation (feet)		Proposed Tip Elevation (feet)	
Socket Length (feet)		Actual Socket Length (feet)	
		Exploratory Hole Depth (feet)	
		and Results Description ¹	
		Is the socket solid, with no voids or significant seams?	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Change in Tip Elevation (feet)	

REMARKS

1. The description "satisfactory material" will not be acceptable for the description of material encountered in the exploratory hole.
2. Email to the Construction Bureau – Bridge Section for review and forwarding to Bridge Bureau and Materials & Tests Bureau for approval. Send a copy to the Area Construction Office, Project Manager, and Prime Contractor.
 - a. If Change in Tip Elevation is 2 feet or less, review/approval can be made at the Area Construction Engineer level, unless there are vicinity sinkholes or other unusual circumstances. A final copy will be sent to the Construction, Bridge, and Materials & Tests Bureaus.
 - b. ATRP, County, and Municipal projects where the bridge design or bridge foundation report were prepared by an Engineer on behalf of the County or Municipality, will be forwarded through the Project Manager for review/approval by the Engineer of Record.
3. The Reviewer must consider the following issues:
 - Compare the request to the plans.
 - Compare the request to the Foundation Report.
 - Compare the request to the boring logs.
 - Verify the socket length is per plans and the condition of the socket.
 - Verify there are no seams or voids within the socket and that the socket is solid.
 - Verify the description for the exploratory hole and that it is good material (borings).

Approved _____ and Approved _____
State Bridge Engineer State Materials & Tests Engineer

Approved _____ or Approved _____
Area Operations Engineer (if applicable)^{2a} Engineer of Record (if applicable)^{2b}