



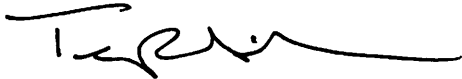
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 7, 2012

MEMORANDUM TO: Division Engineers

FROM: Terry R. Gibson, P.E. 
Chief Engineer

SUBJECT: Construction by State Forces on Federal Aid Projects

The Federal Highway Administration (FHWA) has formally approved the process we recently proposed for documenting the use of state forces to perform work on federal aid projects as indicated in the attached letter from John F. Sullivan. Please use the attached form, guidelines, and example to properly document any future approvals you grant for use of this process.

FHWA has indicated that this process will be incorporated into the next revision of the FHWA-NC/NCDOT Stewardship and Oversight Agreement if implementation is successful. Please note that FHWA intends to perform an audit of the process prior to its incorporation into that agreement. Please maintain a central file of all approvals at the Division Office to facilitate future reviews by FHWA or other auditors.

If you have any questions about this matter please contact State Construction Engineer Ron Hancock at (919) 707-2401.

Attachments

cc: R. E. Greene, Jr., P.E.
R. A. Hancock, P.E.
J. K. Lacy, P.E.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
CHIEF ENGINEER'S OFFICE
1536 MAIL SERVICE CENTER
RALEIGH NC 27699-1536

TELEPHONE: 919-707-2500
FAX: 919-733-9428

WEBSITE: WWW.NCDOT.GOV

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC



U.S. Department
of Transportation
**Federal Highway
Administration**

North Carolina Division 310 New Bern Avenue, Suite 410

Raleigh, NC 27601

(919) 856-4346

(919) 747-7030

<http://www.fhwa.dot.gov/ncdiv/>

October 19, 2012

In Reply Refer To:
HDA-NC

Mr. Terry Gibson, PE
Chief Engineer
North Carolina Department of Transportation
1543 Mail Service Center
Raleigh, NC 27699-1543

Dear Mr. Gibson:

Thank you for submitting the NCDOT Force Account Construction Method on Federal-aid Projects as a proposed programmatic agreement between the NCDOT and the FHWA-NC. We have reviewed the method's approval form and the required data for use of force account on delegated Federal-aid projects. We find that it meets the requirements of FHWA Order 5060.1 and therefore approve it for use in North Carolina. Enclosed is a copy of our stamped approval.

This approved force account programmatic agreement should be referenced in the next revision of the FHWA-NC/NCDOT Stewardship and Oversight Agreement. At that time, both of our offices should conduct a brief review of the Force Account Construction Method on Federal-aid projects to check compliance and consistency of application. We should then evaluate the effectiveness of the agreement and make any necessary changes to the method based on those review findings.

Thank you for your consideration and the effort of your staff in this matter. Please contact Mr. Brad Hibbs (919-747-7006) in our office if you have questions.

Sincerely,

John F. Sullivan, III, P.E.
Division Administrator

Enclosure

cc: Mr. Jon Nance, PE; NCDOT Deputy Chief Engineer
Mr. Ricky Greene, PE; NCDOT Director of Asset Management
Mr. Ron Hancock, PE; NCDOT State Construction Engineer
Mr. Kevin Lacy, PE; NCDOT State Traffic Engineer



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

August 30, 2012

Mr. John F. Sullivan, III, PE
Division Administrator
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27610-1418

Subject: Force Account Construction Method

Dear Mr. Sullivan:

Attached for your review and concurrence are the procedures the Department has developed for administration of FHWA Order Number 5060.1 titled *Policy on Agency Force Account Use* dated March 12, 2012. Included are the policy guidance, approval form, and example cost estimates which will be distributed across the agency and included in the Construction Manual.

Should additional information be required, please advise.

Sincerely,

T. R. Gibson, PE
Chief Engineer

Attachments

cc:

J. G. Nance, PE
R. E. Greene, Jr., PE
R. A. Hancock, PE
J. K. Lacy, PE

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
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TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

RECEIVED AND RECORDED
FOR APPROVAL
9/12/12 Bradley D. Keith
LATE

Edward



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION Request to Perform Force Account Construction on Federal Aid Project

The term Force Account Construction refers to construction work NCDOT performs on a federal funded project using its own forces. Specifically it means the direct performance of highway construction work by NCDOT by use of labor, equipment, materials, and supplies furnished by NCDOT and used under its contract terms. All Force Account Construction shall be performed in accordance with the FHWA Order titled "FHWA Policy on Agency Force Account Use". Approval must be granted by the Division Engineer prior to commencement of Force Account Construction. The Division Engineer's authority is limited to a maximum of \$50,000 on Delegated Authority projects only. Amounts in excess of \$50,000 must be approved by the Chief Engineer. Force Account Construction on Full Oversight projects (Step-by-Step) must be approved by FHWA.

CONTRACT NO: _____ **WBS NO:** _____
TIP NO: _____ **FEDERAL AID NO:** _____
COUNTY: _____

1. Description of the Force Account work:

2. Justification (Emergency or More Cost Effective):

3. Estimated Cost and Cost Comparison Documentation:
(Summarizè here and include actual documentation as an attachment)

Requested By: _____ Division Maintenance Engineer DATE: _____	Approval Granted: _____ Division Engineer DATE: _____
Approval Granted (Only required for work over \$50,000): _____ Chief Engineer DATE: _____	Approval Granted (Full Oversight Projects Only): _____ FHWA DATE: _____

FORCE ACCOUNT CONSTRUCTION METHOD ON FEDERAL AID PROJECT

The term “Force Account Construction Method” refers to construction work the Department performs on a federal aid project using its own forces. Specifically it means the direct performance of highway construction work by the Department using labor, equipment, material, and supplies furnished by the Department. This method of constructions is only intended to be used in special circumstances with the required construction is the result of an “emergency” situation or when force account construction is more practical and more cost effective than competitive bidding practices.

All Force Account Construction work shall be performed in accordance with FHWA Order No. 5060.1 titled *FHWA Policy on Agency Force Account Use*. This order can be viewed in detailed at <http://www.fhwa.dot.gov/legisregs/directives/orders/5060.3htm>. Before performing work using the force account construction method the contract administrator requesting this method of construction and the final approval authority should review the above referenced order and consider and verify the following:

1. The Department has the experience, resources, and demonstrated ability to complete the work with as the same level of quality as that expected if the work was performed through the competitively bid construction process.
2. Performance of the work with Department forces is more cost effective than the cost at competitively bid prices.
3. Performance of the work with Department forces will not compromise the attainment of the approved Disadvantaged Business Enterprise (DBE) goal.

Approval must be obtained from the Division Engineer prior to commencement of Force Account Construction work. This contract administrator should submit Form (881-FAC) “Request to Perform Force Account Construction on Federal Aid Project” to the Division Engineer. A cost comparison estimate that shows the comparison between the force account construction method and competitively bid construction must be included with the request (see the example at the end of this section.) Also include documentation where prior attempts to bid the work were unsuccessful due to high bids or a lack of bids. The Division Engineer’s authority level for approving this method of construction is \$50,000 on Delegated Authority projects only. All requests over \$50,000 must be approved by the Chief Engineer. The use of Force Account Construction method on Full Oversight projects (Step-by-Step) must be approved by FHWA. Once approval has been obtained, work may commence with charges being posted to the original project WBS element.

Once all work has been completed, a verification estimate should be performed to compare the actual cost to the estimate to validate the used of this method of construction for future reference.

Example Force Account Construction Method Cost Analysis

¹Estimate of Competitively Bid Construction

Item	Cost
Mobilization	\$ 1,000.00
Pavement Markings - Paint (11,000 lf @ \$0.50/lf)	\$ 5,500.00
Traffic Control	\$ 1,000.00
Total Cost	\$ 7,500.00

Estimate of NCDOT Force Account Construction

Item	Cost
² Labor	\$ 675.00
³ Equipment	\$ 573.50
⁴ Materials	\$ 2,125.30
Total Cost	\$ 3,373.80

Difference in Estimated Cost **\$ 4,126.20**

Notes

1. When preparing the Estimate of Bid Construction, use contract prices if work is performed on an existing contract and the items are available. Otherwise use bid averages or independent estimate performed by the Division Contract Officer.
2. Labor should be calculated using current Activity Rates for the cost center. These can be found using transaction KSBT in SAP.
3. Use the Department's actual equipment rental rate for the cost center. This is found using ZPSR15 in SAP. If the equipment is under rental agreement, use the quoted or invoiced price and include as an attachment.
4. Include an itemized list of materials with supplier quotes.
5. Include documentation if prior attempts to bid the work resulted in high bids or lack of bids.