

# CONSTRUCTION OF FEDERALLY FUNDED LOCAL AGENCY PROJECTS BY NON-COMPETITIVE BID CONTRACT (FORCE ACCOUNT)

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Guidelines in the Code of Federal Regulations (CFR) Title 23, part 112, and 23 CFR 635.104(b), allow federal aid construction work to be completed by a method other than competitive bidding. This method, known as the “**Noncompetitive Bid Contract**”, or **Force Account** method, authorizes the local municipal agency, generally described as a county, city, or village, to complete the project by furnishing the labor, equipment, and materials under its direct control. Work to be completed by force account may be either a stand alone project, or may be a phase of a larger, competitively bid project.

In this document, “Local Agency” generally refers to an existing municipality that has been designated to be able to receive Federal or State transportation funding in Public Act 51 (PA 51) of 1951 of the State of Michigan, as amended. These municipalities include cities, villages, and County Road Commissions.

As part of the tasks to be completed before authorization, the local agency must provide documentation demonstrating the **cost effectiveness** of completing the project by force account, and justify that the public’s best interest is best served by the force account project, rather than by competitive bidding.

Generally, PA 51 requires all federal aid construction projects with estimated construction cost exceeding \$100,000 be completed by contract awarded following receipt of competitive bids. In addition, 23CFR 635.204 requires a demonstration of cost effectiveness before the force account work can be authorized. Because the cost effectiveness is determined using estimates prepared by the local agency, the practice of requiring a demonstration of a minimum savings of six percent has been established. This threshold limit is in accordance with policy discussions and agreements between FHWA, MDOT, and other interested parties in 2003. This demonstration allows projects to be completed by force account only when a six percent or greater savings is demonstrated, with the resulting project construction cost of the force account work being less than \$94,000.

Michigan Department of Transportation’s Local Agency Program (LAP) staff periodically posts a list of authorized force account or non-competitive bid projects on its website, at [www.michigan.gov/mdotlap](http://www.michigan.gov/mdotlap).

## **Program Dollar Limits**

Currently, neither the Federal Highway Administration (FHWA) nor the Michigan Department of Transportation (MDOT) limit the total annual number or total annual dollar value of projects which can be authorized on a program wide basis. Similarly, neither FHWA nor MDOT limit the total annual number or total annual dollar value of projects which a local agency can be authorized to be completed using the force account method.

## **Project Limits**

The limits of the proposed force account project shall agree with those listed on the approved STIP. Adjacent or overlapping projects proposed for force account shall not be requested to be authorized in the same fiscal year. MDOT will authorize force account projects in the same fiscal year that have reasonable separation, which is generally accepted to be at least two miles.

The local agency shall not request or otherwise adjust the limits of approved projects in order to keep the estimated cost of the project less than the total non-competitive bid project cost limit.

MDOT reserves the right to combine several projects, which would normally qualify for force account authorization, having similar work type, within close proximity, to allow the proposed construction to be competitively bid.

## **Project Eligibility**

A local agency and its proposed project must meet certain eligibility criteria in order to receive the force account authorization.

The proposed project must be identified and approved by the appropriate Metropolitan Planning Organization (MPO) or Rural Task Force (RTF), as a project with defined limits and scope of work. MDOT must then approve and program the project. Following approval and programming, the proposed project must be included in the approved State Transportation Improvement Plan (STIP).

The local agency shall design and construct the project in accordance to current applicable standards and guidelines of American Association for State Highway and Transportation Officials (AASHTO), FHWA, and MDOT.

Projects eligible for force account authorization include:

- A phase of a project, or a complete project, with the construction cost estimate for competitively bidding the project being less than \$100,000 and with the local agency's force account cost estimate demonstrating that it can complete the work at a savings of at least six percent when compared to the estimated cost to competitively bid the work. This method is outlined in the main paragraphs of this document.
- Minor public utility work regardless of cost, to be completed either by a railroad or the public utility, on an existing system currently located within the limits of the proposed project and owned by the utility, with work to be completed by that utility, subject to one of the following criteria:
  - The utility performs the work with its own forces;
  - The utility company obtains a subcontract secured under a fully competitive

- bidding process; or
- The utility company is responsible for completing the work as part of its established contract or franchise agreement with the local agency.

In accordance with 23 CFR part 112, and 23 CFR 635.205(b), Minor Utility force account work proposed to be completed by utilities and railroads is not subject to the \$100,000 cost limitation provision or the requirement to demonstrate the six percent savings.

- Special Projects, if all of the following criteria are met:
  - The local agency has traditionally performed work of the type proposed, and has a contract with a specialty supplier to provide material or equipment at a fixed price.
  - The work cannot be defined in bid documents due to the nature of the work. Usually, this is work on existing infrastructure that may require testing or experimentation on a site by site basis in order to obtain the desired results (i.e., adjusting signals, interconnections, or making systems work, all of which requires a detailed knowledge of the existing infrastructure).
- Noncompetitive bid projects for which the local agency's engineer's estimate for construction by competitive bid exceeds the \$100,000 limit. If MDOT concurs with the local agency, the LAP staff engineer will forward the project to FHWA for exemption concurrence. Following receipt of that concurrence, MDOT will submit the project to the State Transportation Commission and Legislature for its 90-day review and approval. Because this method is rarely used, it is more completely described in Condition 2 in Appendix I.
- Emergency Repair projects, for cases when an emergency situation exists which affects the health and welfare of a community and time is of the essence. In this case FHWA and MDOT may determine that completing the project by force account authorization is cost effective. Since this method is rarely used, it is summarized in Condition 3 in Appendix I. Guidelines for constructing and administering Emergency Repair projects are listed on the MDOT LAP website, in the section headed "Federal Emergency Repair Program".

Work on existing private utilities can be completed by force account authorization, but such work is not eligible for federal funding unless such utilities are located within its own private easement, separate from the public right of way or easement, and the proposed utility work is required to allow successful completion of the approved federal aid project.

Major Utility Work, defined as constructing or installing a new system within the project limits where no system currently exists, is not allowed to be constructed by force account, and will be constructed by competitive bid.

### **Requirements for Force Account Authorization**

The local agency requests approval for the force account authorization by preparing the following documents and forwarding them to the MDOT LAP staff engineer:

- a written statement from the local agency that it has the financial capability and can furnish adequate materials, experienced labor forces, and the equipment required to complete the project.
- a written statement from the local agency demonstrating that the public's best interest would be served by completing the project by force account.
- appropriate construction plans, details, special provisions, a construction cost estimate presuming the project will be competitively bid, a separate construction cost estimate representing the local agency's proposed force account cost, and program application, along with copies of all required permits, approval letters, and right of way certifications, all prior to obligation of the federal funds.
- an estimate of the project duration, and the proposed project completion date.

Following receipt of the local agency's documentation, the MDOT LAP staff engineer will arrange and conduct a grade inspection plan review meeting, and will process the project in a manner similar to other projects that are competitively bid.

#### **Force Account - Construction Cost Estimates and Documentation – Minor Utility Work**

For Minor Utility Work projects, including work to be completed by a public utility or a railroad, the local agency should obtain or prepare a purchase order from the utility or railroad, which itemizes the proposed minor utility work in detail. The local agency should forward the cost estimate to the MDOT LAP staff engineer, along with the other required project documents. Following receipt of the local agency's documentation, the MDOT LAP staff engineer will arrange and conduct a grade inspection plan review meeting, and will process the project in a manner similar to other projects that are competitively bid.

In accordance with 23 CFR part 112, and 23 CFR 635.205(b), minor utility force account work proposed to be completed by utilities and railroads is not subject to the \$100,000 cost limitation provision or the requirement to demonstrate the six percent savings.

#### **Force Account - Subcontracting**

Subcontracting of authorized force account work is allowed for up to ten percent of the amount of the force account authorization. Costs associated with the subcontracted work are eligible for reimbursement of federal funds. The cost of the subcontracted work must be included in the local agency's force account estimate and the total project cost, including the subcontracted work, is subject to the \$100,000 limit. Work completed by subcontract is subject to all current requirements for Federal Aid projects, including the requirements for competitive bidding and applicable prevailing wage rate requirements.

For proposed force account projects having subcontracted work, the local agency must submit to the MDOT LAP staff engineer its documentation regarding the method it used to select and obtain the subcontracted work. This documentation should include a summary of the local agency's selection criteria, its advertisement, and the proposed subcontract document. All proposed subcontracts must be reviewed by the Department prior to the MDOT LAP staff engineer issuing the force account authorization.

If more than ten percent of the work is subcontracted then the entire force account project is ineligible to receive federal or state funds and all costs previously reimbursed to the local agency shall be repaid to the State of Michigan.

### **Force Account - Construction Cost Estimates and Documentation – Proposed Construction**

The local agency shall prepare two separate construction cost estimates and forward them to the MDOT LAP staff engineer. One estimate will be prepared presuming the project will be constructed using competitive bids, and should be based on the plans and special provisions prepared by the local agency and submitted to MDOT LAP. The estimate should be prepared using the Michigan Engineer's Research Library (MERL) format. The second cost estimate is the local agency's proposed cost to complete the project by force account, and should include the agency's estimate of labor, equipment, and material, as well as subcontracting cost, if any. MDOT's authorization for the force account project will be issued using this cost estimate.

The local agency's estimate must be prepared on a force account basis, rather than unit price basis. Costs associated with profit and overhead are not allowed to be included in the force account estimate. Also, costs associated with professional engineering services, including but not limited to design engineering, construction engineering, testing, staking, and inspection, are not allowed to be included in the force account estimate. The local agency must construct the project according to the same specifications that would be required by the competitive bid process. Finally, the local agency must provide documentation and justification for all differences in project items and quantities between the two cost estimates.

The local agency's detailed force account estimate should include the following:

- All labor costs including hours and pay rate for supervisors, laborers, drivers, operators, etc.
- All equipment required to complete the project with hours of use and rental rates for graders, bulldozers, tandem trucks, etc. Rental rates will be based on actual costs with receipts or based on Schedule C rates approved by the MDOT Office of Commission Audit (OCA).
- Costs for all materials to be used in the project (aggregate, HMA, culverts, drainage structures, devices to maintain and control traffic during construction, lights, etc.). If material is supplied by the local agency, the value of the material should be defined

as the price listed on their cost inventory sheets.

In order for the force account work to be authorized, the two cost estimates must demonstrate that the local agency can complete the work at a savings of at least six percent when compared to the estimated cost to competitively bid the work. Therefore, for projects that are not classified as Minor Utility Work, the maximum authorized amount of the force account authorization will be less than \$94,000.

### **Authorization of the Force Account Project**

After receiving all the acceptable documents for the project from the local agency, the MDOT LAP staff engineer will request that the federal funds be obligated, and MDOT will prepare the cost sharing agreement for the project. The MDOT LAP staff engineer will issue the force account authorization to the local agency to construct the project, typically using the State of Michigan electronic authorization process currently identified as the Local Agency Reimbursement System (LARS).

All force account work should be authorized by the MDOT LAP staff engineer before the local agency begins work on the project. In accordance with federal regulations, all work performed without MDOT authorization will not be eligible for reimbursement with federal funds. Also, MDOT will not issue any reimbursements until the cost sharing agreement between MDOT and the local agency is fully executed.

### **Modifying the Original Force Account Authorization**

The authorized amount of the force account project may be increased using a contract modification, after the local agency forwards adequate documentation to the MDOT LAP staff engineer that supports the additional work. The modification is generally the result of extra work being required within the approved project limits, but is not the result of additional work items or a change in project scope. In this case, MDOT may increase the cumulative authorized project amount to \$100,000.

If the cumulative authorized amount exceeds \$100,000, MDOT must have concurrence by the FHWA and be submitted for the 90-day review to the State Transportation Commission and Legislature.

If the local agency elects to complete the project prior to obtaining the necessary approvals, no reimbursement for the additional costs will be made.

Case 1: A local agency has been authorized for an \$84,600 force account project, based on its demonstration of cost savings of at least six percent, for a project with a contracted cost estimate of \$90,000. During construction, additional work is required due to unforeseen circumstances, resulting in an increase of the project cost to \$99,000. The local agency prepares documentation supporting its request for the additional work, and forwards this documentation to the MDOT LAP staff engineer for approval. Following approval, the staff engineer will issue an additional LARS

authorization to the local agency for the additional work, and the local agency can request reimbursement of the original \$84,600 project cost plus the additional amount up to \$8,460, included in the approved contract modification. Note that in this case total reimbursement will not exceed \$93,060, which 94% of the total cost of the project if it were constructed using the contract method.

Case 2: A local agency has been authorized for a \$84,600 force account project, based on its demonstration of cost savings of at least six percent, for a project with a contracted cost estimate of \$90,000. During construction, additional work is required due to unforeseen circumstances, resulting in an increase of the project cost to \$110,000. The local agency prepares documentation supporting its request for the additional work, and forwards this documentation to the MDOT LAP staff engineer for approval. Following approval, the staff engineer will issue a LARS authorization to the local agency for the additional work up to \$100,000, and the local agency can request reimbursement of the original \$84,600 project cost plus the additional amount up to \$10,400, included in the approved contract modification. Note that in this case total reimbursement will not exceed \$94,000, which 94% of the total cost of the project if it were constructed using the contract method.

For the portion of the proposed additional force account work exceeding the \$100,000 limitation, MDOT will request concurrence from FHWA and then submit the project to the State Legislature for the 90-day review. Following approval after the 90-day review, MDOT will issue the additional LARS authorization to the local agency for this work, and the local agency can request reimbursement of the project costs that exceed \$100,000, as included in the approved contract modification. In this case, the local agency is cautioned to not begin such work until MDOT receives all the required concurrences and approvals, and issues the authorization for the work.

All force account work must be authorized by the MDOT LAP staff engineer before the local agency begins work on the project. All work performed without MDOT authorization will become not eligible for reimbursement with federal funds.

Costs exceeding \$100,000 may or may not be eligible for federal fund reimbursement pending the determination of eligibility.

### **Force Account - Extending Previously Authorized Completion Dates**

The local agency will include with its grade inspection package submittal an estimate of the project duration and the proposed project completion date. If the actual project completion date does not fall within the period included on the authorization, an extension of time must be requested to and approved by the MDOT LAP staff engineer. The staff engineer will issue a revised authorization if the extension of time is approved. Items of work performed after the completion date in the authorization may or may not be accepted for reimbursement depending on the department analysis of the reason and circumstance for the late completion.

### **Documentation Required During Construction**

Each local agency is responsible for obtaining the construction related documents and maintaining the construction file record, in accordance with current MDOT construction manual requirements. Information to be maintained in the file includes, but is not limited to:

- Inspection records, job site posters, material certifications, and testing results
- Work Zone Safety analyses and documentation
- Wage rate interviews and biweekly payroll reports and certifications if subcontractors are used
- Contract modifications
- Project correspondence

The construction record should be kept on file in a manner similar to other federal aid projects that are competitively bid, for final MDOT review and audit. MDOT LAP staff will conduct a final site visit and inspection of the project, after the local agency submits its request for final fund reimbursement.

### **Required Billing Information**

Local agencies will request reimbursement using MDOT's electronic reimbursement system, currently referred to as the Local Agency Reimbursement System (LARS). Information regarding LARS is available on the MDOT LAP website, or by contacting the MDOT LAP staff engineer. Guidelines for the reimbursement request include the following:

- The billing statement submitted through LARS must reflect the same level of detail as described in the local agency's original force account cost estimate. DO NOT submit documents with code numbers unless a legend is provided describing the codes.
- Labor costs must be documented by certified payrolls, received from subcontractors and certified by the local agency.
- A breakdown of materials must be listed and the value of the material defined. If material was purchased, a copy of the voucher must be submitted.
- Equipment used for the project must be detailed and supported by either Schedule C rates approved by MDOT's Office of Commission Audit (OCA) or rental receipts when applicable.
- Profit and overhead are not allowed to be included in force account reimbursements.
- If more than ten percent of the work is subcontracted then the entire force account project is ineligible to receive federal or state funds and all costs previously reimbursed to the local agency shall be repaid to the State of Michigan.

## APPENDIX I

### **Basis for Cost Effectiveness Required for Authorization of Force Account Projects**

According to Title 23, part 112 and 23 CFR 635.203(e), “The term *cost effective* shall mean the efficient use of labor, equipment, materials, and supplies to assure the lowest overall cost”.

Cost effectiveness is determined as follows:

- Condition 1: Projects less than or equal to \$100,000 based on the engineer’s estimate for construction by competitive bid. The local agency will demonstrate the prudent use of public funds by documenting that it can perform the work at a cost greater than six percent less than the estimated cost of competitively bidding the project.
- Condition 2: Projects greater than \$100,000 based on the engineer’s estimate for construction by competitive bid. The local agency may perform the work provided the following conditions are met:
  - The project was previously competitively bid.
  - The low bid received on the project exceeded the engineer’s estimate for construction by at least ten percent.
  - The Department and the local agency reviewed the bids and determined that the bid amounts were not a result of unclear contract plans or proposal information or other conditions that would result in an increase in the estimated project costs. If this is not the case, and the Department and local agency determine that the plan, proposal, estimate, or other unconsidered factors may have caused the increased bids, then the Department will require that the project be rebid.
  - If the bid review has not shown any underlying reason for a bid 10% or more over the engineer’s estimate for construction by competitive bid, the Department may consider allowing the project to proceed using the non-competitive bid process, provided the local agency demonstrates that the project can be completed by force account at a cost at least six percent less than the engineer’s estimate. In this case, MDOT will contact FHWA for its concurrence and, following the concurrence, will submit the project for the 90-day review to the State Transportation Commission and Legislature. After the 90-day review is completed, the MDOT LAP staff engineer will authorize the local agency to perform the work by force account, and limit the project cost limit to the local agency’s force account estimate. This amount will not change unless a change order for the increased work has been received and approved by the MDOT LAP staff engineer.
  - If the project was advertised and the no competitive bids were received, MDOT will review the project documents to determine that the reason that bids were not

submitted was not due to reasons related to the proposal documents or other factors that should have been considered. In this case, MDOT LAP and the local agency may determine that the project is cost effective for the local agency to perform the work.

If MDOT determines that the project documents may have been the reason that no bids were received, then MDOT will require that the local agency revise the bid documents, and bid the project again.

- Condition 3 Timeliness due to an emergency

When a situation exists which affects the health and welfare of a community (i.e., seasonal situation, public safety, or unforeseen events) and time is of the essence, MDOT and FHWA may determine that the project is cost effective if the local agency can demonstrate that contractors cannot respond within a reasonable time.

The following criteria need to be met in order to utilize the non-competitive bid procedure for state or federal funds for these Emergency Repair projects:

- A State of Emergency has been declared by the Governor.
- FHWA has approved the proposed project as eligible to receive federal Emergency Repair funds
- The local agency has prepared a cost estimate to repair the site, the estimate is greater than \$5,000 per site, and FHWA has approved the estimate.

The MDOT LAP staff engineer will request fund obligation from FHWA, and issue the appropriate authorization to the local agency using LARS.

The local agency shall request reimbursement for costs associated with these projects after the Federal Emergency Repair funds are allocated and appropriated by the federal government. The local agency is cautioned that such Emergency Repair funds may not be available for timely reimbursement and, in some cases, may not become available for several years. In such cases, local agencies can use their other available federal aid, with appropriate approval of its MPO agency or its Rural Task Force. Federal aid used in this case would be reimbursed when and if the federal Emergency Repair funds become available.

Guidelines for constructing and administering Emergency Repair projects are included on the MDOT LAP website, in the section headed “Federal Emergency Repair Program”.