

Air Force Civil Engineer Center

# Military Construction (MILCON)

## CHANGE ORDER MANAGEMENT PLAN



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

8 APR 13

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## **MILITARY CONSTRUCTION CHANGE ORDER MANAGEMENT PLAN**

### **EXECUTIVE SUMMARY**

1. Funding equal to 5% of the contract amount at award is normally reserved in the amount of 2% for contingencies and 3% for management reserve for Military Construction (MILCON) projects. These funds may be used for Air Force and Construction Agent (CA) mandatory or non-mandatory i.e., user requested changes, within the parameters set by the AFCEC Change Order Management Plan.
2. The CA must coordinate all changes with the AFCEC Project Manager prior to execution.
3. For mandatory changes less than \$100K that can be executed within the allotted funds, the agent may proceed with the change once it has been coordinated with the AFCEC PM. Mandatory changes over \$100K or exceeding 75% of the available contingency funds will be submitted on a MILCON change request form (CRF) (atch 1) and approved in accordance with the AFCEC Delegation of Approval authority memorandum (atch 2). Base agency and MAJCOM validation are not required on mandatory changes.
4. Non-mandatory or user-requested changes must be approved in accordance with the AFCEC Delegation of Approval authority memorandum (atch 2) and will be strictly monitored to avoid exhausting available contingency funds prior to identification and resolution of all mandatory changes. They will only be approved and implemented if AFCEC determines they are necessary to meet mission requirements or remedy a safety hazard and do not cause unacceptable schedule or cost impacts to the contract. All user-requested changes will be documented on a MILCON CRF with endorsement from the base and MAJCOM.
5. The Base Civil Engineer (BCE) or Deputy Base Civil Engineer (DBCE) is the base validation authority for user requested modifications. The BCE will coordinate cost and schedule impacts with the CA and will notify the appropriate MAJCOM representative for MAJCOM validation prior to submittal. This signature validates the installation's request for the modification.
6. A non-mandatory modification can also result in a credit for the project as long as it does not impact functionality and schedule. A CRF from the BCE or DBCE is still required in this case.
7. Non-mandatory change proposals after 65% construction complete will not be allowed except under extraordinary circumstances.
8. AFCEC will approve or disapprove user change requests **within 5 working days** of receiving a validated CRF from MAJCOM.

## **CHANGE ORDER MANAGEMENT**

### **1. PURPOSE**

Approved change orders are contract modifications issued after award and are funded from available contingency funds. The HQ USAF/A7CP -AFCEE Management Plan for the Air Force Capital Construction Program (1 Jun 11) policy for managing capital construction projects is to limit contract cost growth and construction impacts by intensively managing contract changes. A maximum 5% contingency is provided for unforeseen site conditions and other project critical changes that arise. Funds are managed by providing an initial 2% contingency, with the additional 3% held in management reserve to be provided to the agent when the 2% funds are exhausted. Strict financial control is affected in order to limit cost growth on each project.

Changes can be identified by customers, support agencies, Base Civil Engineer (BCE) Staff, the Construction Agent (CA), Major Commands (MAJCOMs) or the construction contractor for a multitude of reasons. These stakeholders share interest in the success of the project and are a source for valid project changes. AFCEC/CF Project Managers (AFCEC PM) lead these Project Delivery Teams (PDT) to effectively manage changes within project delivery schedule and budget. Judicious management controls are necessary to ensure change orders minimize the impact to cost and schedule.

There are two general categories of construction change orders: mandatory and non-mandatory. Mandatory changes are unavoidable changes required to allow construction to continue, and provide a complete and usable real property facility. Such changes are caused by unforeseen factors encountered during design or construction, e.g., design errors, criteria changes mandated for immediate implementation by HAF, differing site conditions, or unavailability of materials. These changes include those absolutely necessary for completion of the project but not those justified by improved efficiency of operation, maintenance, function, or appearance.

Non-mandatory changes include user and CA requested changes. Non-mandatory changes include any criteria changes that are not mandated for immediate implementation by HAF; changes that would improve the efficiency, maintainability, functionality, or appearance of the facility; and resiting a project during design or construction. User requested changes are generated by changes in mission, operational procedures, equipment, or capabilities. CA requested changes are generally those changes recommended by the CA or the construction contractor to improve the design or to implement contractor Value Engineering Proposals. Non-mandatory changes may provide benefit to the government but are still optional in nature, i.e. failure to implement these changes will not prevent the completion of a fully functional facility.

### **2. GUIDANCE**

Congress authorizes each project and then appropriates funds for that project. The authorized and appropriated amount may not exceed designated scope and appropriated threshold amounts without Congressional approval/notification. If necessary, changes will be processed for

Congressional reporting and/or reprogramming in accordance with the requirements of AFI 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects*, AFI 32-6002, *Family Housing Planning, Programming, Design and Construction* or HAF-AFCEE Management Plan for the Air Force Capital Construction Program (1 Jun 11)

### **3. CONTINGENCY AND MANAGEMENT RESERVE FUNDS**

Early Requirement Identification: Full and open exchange of ideas, inputs and suggestions from stakeholders during project design will minimize the need for changes during construction. Without such early interaction, post-construction input on features, configuration and aesthetics will be unnecessarily expensive. Project stakeholders should understand that construction changes can have significant impacts on project cost and schedule. A defined process to screen and prioritize any requested changes early in the construction process is essential in maintaining adequate reserve funds for unanticipated changes that may be needed later in construction, when cost and schedule impacts are generally more significant.

Non-mandatory changes are intensively managed to ensure management reserve funds are sufficient to execute higher priority changes within the overall MILCON program. Non-mandatory changes will be considered only when they do not cause unacceptable contract schedule or cost impacts. The CA maintains and tracks project contingency funds to provide funding for mandatory changes as required during construction.

If available, funds equal to 5% of the contract amount at award may be reserved for contingencies and management reserve and are distributed as follows:

- Funds equal to 2% of the contract amount will fund approved mandatory and non-mandatory contract changes.
- Funds equal to 3% of the contract amount at award are set aside for the Air Force management reserve account.

The above funds may be used for Air Force and CA mandatory or non-mandatory i.e., user requested changes, within the parameters set by the Change Order Management Plan. All changes will be coordinated with the AFCEC PM.

### **4. THE CHANGE ORDER PROCESS**

The PDT must carefully consider project cost and schedule impacts when evaluating proposed changes. Approved changes adjust the baseline performance measures, thus affecting performance metrics and project quality objectives. Effective change management should ensure that the cumulative changes do not exceed 2% cost growth or 5 % schedule growth.

The CA must track change order requirements and maintain careful accounting of requested, pending and executed construction modifications. All changes must be coordinated with the

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AFCEC PM and approved by AFCEC Division or Branch Chief (O-5 or equivalent) based upon the AFCEC Delegation of Approval authority memorandum when required.

**Execution of Mandatory Changes:** Mandatory changes must be concurred by the CAs Contracting Officer Representative, the Contracting Officer and the AFCEC PM as a mandatory change. Once a change is agreed as mandatory, the CA may proceed with contracting actions if the estimated change is less than \$100K and funds are available. If the requested change is over \$100K or exceeds 75% of the available contingency, a CRF must be submitted by the CA and approved by the appropriate AFCEC approval authority in accordance with the AFCEC Delegation of Approval authority memorandum. Once approved, the AFCEC PM will initiate a funds request if required.

**Execution of Non-Mandatory Changes:** Non-mandatory changes will be considered if deemed necessary by the AFCEC PM and supported by contractor initiated Value Engineering Change Proposals (VECP). Non-mandatory changes may be implemented during the basic contract work if they cannot reasonably be deferred due to the nature of the work or if earlier implementation is in the best interest of the Government. Nevertheless, non-mandatory changes will be managed to avoid exhausting available contingency funds prior to identification and after resolution of all mandatory changes so that implementation of non-mandatory changes does not cause unacceptable schedule or cost impacts to the contract.

The AFCEC PM will forward all Air Force non-mandatory change proposals to the CA for implementation only after BCE approval, MAJCOM validation and AFCEC approval in accordance with the AFCEC Delegation of Approval authority memorandum.

In the event a user requested change is disapproved, the BCE in coordination with the user, Installation Commander and the MAJCOM can pursue reconsideration by providing additional justification for the proposed change. These requests will be coordinated through the AFCEC PM to applicable AFCEC Branch Chief and AFCEC/CF Division Chief for final resolution.

**Change Request Form (CRF):** The CRF will furnish detailed descriptions and justifications for the proposed changes with estimated impacts to project execution. This information is vital to support informed decision-making and provide the basis for AFCEC PM change request approval and implementation. Adequate descriptions and justifications for change requests expedite the PDT approval process and helps screen unnecessary or unwarranted requests.

A user requested modification can also result in a credit for the project as long as it does not impact functionality and schedule. A CRF is required from the BCE or DBCE in this case also.

AFCEC will process change requests **within 5 working days.**

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**Change Order Tracking:** The CA will use their existing construction management system for tracking change orders and the AFCEC PM shall track in ACES. The CA will maintain a list of all modification Requests for Proposals (RFP) and corresponding contract changes and will provide status reports at the construction oversight meetings. Electronic copies of RFPs will be forwarded to the AFCEC PM prior to issuing to the contractor and final contract changes will be forwarded once completed.

## DESCRIPTIONS AND DEFINITIONS

**Project Delivery Team (PDT):** Customers, Support Agencies, Base Civil Engineer (BCE) Staff, MAJCOMs, the Construction Agent (CA) or Design Agent/Construction Agent (DA/CA), and the Construction Contractor

**Design Funds:** For MILCON (P-321 and P331 funds) and Minor Construction (P-341 funds), use P-313 (design) funds for design services and not for advanced planning functions. The O&M accounts funds must be used for advance planning to support MILCON projects. (AFI 32-1023)

**Current Working Estimate:** In design, the current working estimate is the estimated cost to construct a complete facility. In construction, the current working estimate provides the cost to complete the project under contract. (ref: AFI 32-1023)

**Construction Changes:** Once construction is underway, the following types of changes are approved and funded with prior coordination and approval through AFCEC.

**Construction Agent Changes:** Approved by the Construction Agent (CA) and funded with project contingency funds.

**Construction Agent Change Request:** Submitted by the CA, coordinated by the AFCEC Program Manager, and funded with project contingency funds

**Air Force Change Request:** Approved by AFCEC CF with requiring installation and MAJCOM coordination and funded using project management reserve funds.

**Mandatory Changes:** Are unavoidable changes required to allow construction to continue, and provide a complete and usable real property facility. Such changes are caused by unforeseen factors encountered during design or construction, e.g., design errors, criteria changes mandated for immediate implementation by HAF, differing site conditions, or unavailability of materials. These changes include those absolutely necessary for completion of the project but not those justified by improved efficiency of operation, maintenance, function, or appearance.

**Medical MILCON Construction Changes:** Office of the Assistant Secretary of Defense (Health Affairs) OSAD (HA) must approve construction changes over \$100,000 or that exceed available contingency funds, and changes that add new medical services to a project, or exceed approved scope or cost. Construction changes less than \$100,000 must be coordinated with the AF Surgeon General PM prior to approval by the AFCEC Branch Chief.

**Non-Mandatory (or User-Requested) Changes:** Include user and CA requested changes. Non-mandatory (discretionary) changes include any criteria changes that are not mandated for immediate implementation by HAF; changes that would improve the efficiency, maintainability, functionality, or appearance of the facility; and resiting a project during design or construction. User requested changes are generated by changes in mission, operational procedures, equipment, or capabilities. CA requested changes are generally those changes recommended by the CA or the construction contractor to improve the design or to implement contractor Value Engineering



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Proposals. Non-mandatory changes may provide benefit to the government but are still optional in nature, i.e. failure to implement these changes will not prevent the completion of a fully functional facility.

**AFCEC Project Manager (AFCEC PM)**: The AFCEC project manager performing design manager/construction manager duties for specific bases and work in the AFCEC Facilities Engineering Center of Excellence.

**ACRONYMS & ABBREVIATIONS**

AFCEC – Air Force Civil Engineer Center

BCE – Base Civil Engineer

CA – Construction Agent

CF – Facilities Engineering Center of Excellence

CRF – Change Request Form

CWE – Current Working Estimate

DA/CA – Design Agent/Construction Agent

DB – Design Build

DBB – Design Bid Build

DBCE – Deputy Base Civil Engineer

HQ USAF/A7CP – Air Staff Civil Engineer organization over MILCON projects

MAJCOM – Major Command

MILCON – Military Construction

PA – Programmed Amount

PDT – Project Delivery Team

PM – Project Manager

PMO – Project Management Office

PMP – Project Management Plan

POC – Point of Contact

VECP – Value Engineering Change Proposal

ATTACHMENT 1

**CHANGE REQUEST FORM (CRF)**

**Project:**

**Date:**

**Requestor (Name/Organization/phone number):**

**SECTION 1: Type of Change**

Design

Construction

Mandatory

Non-Mandatory

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**SECTION 2: Request for Change**

Change Description:

Change Justification (include reason the change (s) was/were not identified in the initial CCD, RD and included in RFP/design):

Change to Schedule (Days):

Cost of Change (\$) and CWE/PA Change (%):

Change to Scope (%) (Note: Proposals to Increase Scope are NOT Allowed):

Risk or Mission Impact if not implemented (include why workarounds would be unacceptable as a permanent solution):

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**SECTION 3: Coordination**

Agent Project Engineer or Contracting Officer Representative:

Agent Contracting Officer:

AFCEC PM:

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**SECTION 4: Installation Validation (Non-Mandatory changes only)**

**Requesting Organization Commander:** \_\_\_\_\_

**BCE Programs Chief:** \_\_\_\_\_

**BCE or Deputy:** \_\_\_\_\_

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**SECTION 5: MAJCOM Validation (Non-Mandatory changes only)**

**MAJCOM Validation (Title, Signature, and Date):** \_\_\_\_\_

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**SECTION 6: AFCEC Approval**

\_\_\_\_\_ Approved \_\_\_\_\_ Disapproved

Basis for Approval or Disapproval Action:

**AFCEC Approving Official (Title, Signature, and Date):** \_\_\_\_\_

ATTACHMENT 2

# Air Force Civil Engineer Center – Change Order Management Plan



DEPARTMENT OF THE AIR FORCE  
AIR FORCE CIVIL ENGINEER CENTER  
LACKLAND AIR FORCE BASE TEXAS

8 NOV 2012

MEMORANDUM FOR AFCEC/CF

FROM: AFCEC/CL

SUBJECT: Delegation of Approval Authority -- MILCON Change Requests

In accordance with HQ USAF/A7C memo, Guidance on Execution of Air Force Military Construction (19 Dec 11), approval of all non-mandatory (discretionary) changes resides with the Director, AFCEE, and cannot be re-delegated below the branch chief (O-5 or civilian equivalent) level.

AFCEC has developed and oversees the MILCON Change Order Management Plan which establishes procedures, guidelines, and timelines for processing requests. In order to implement this plan to process change requests effectively and efficiently, I hereby delegate approval authority as follows:

a. Facilities Engineering Center of Excellence Division Chiefs approval authority:

1. Mandatory Changes of (CWE)  $\geq$  \$500K
2. Non-Mandatory (Discretionary) Changes  $\geq$  \$250K

b. Facilities Engineering Center of Excellence Branch Chiefs approval authority:

1. Mandatory Changes of (CWE)  $<$  \$500K
2. Non-Mandatory (Discretionary) Changes  $<$  \$250K
3. Any change resulting in no cost to (or a credit to) the Government

The above notwithstanding, any change request that raises the CWE above PA will require higher level HAF, SAF, and/or Congressional notifications or approvals. Additional details are contained in the AFCEC MILCON Change Order Management Plan.

  
JOE SCIABICA, SES  
Director

cc:  
HQ USAF/A7CF  
HQ USACE/CEMP-II  
HQ NAVFAC (EOC)