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No. 1110-3-113

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Engineering and Design
DEPARTMENT OF THE ARMY FACILITIES STANDARDIZATION PROGRAM

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DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
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Regulation
No. 1110-3-113

21 April 2016

Engineering and Design
DEPARTMENT OF THE ARMY FACILITIES STANDARDIZATION PROGRAM

1. Purpose.

a. This regulation establishes policies and procedures for the U.S. Army Corps of Engineers (USACE) to execute the Department of the Army (DA) Facilities Standardization Program.

b. Standard Operating Procedures for the Centers of Standardization (COS) are provided in the appendices.

2. Applicability.

a. This regulation applies to Headquarters, U.S. Army Corps of Engineers (HQUSACE) and all Office of the Chief of Engineers (OCE) elements, major subordinate commands (MSC), district commands, laboratories, and field operating activities (FOA) having military construction (MILCON) responsibilities.

b. This regulation applies to all USACE Centers of Standardization (COS) and their associated activities.

3. References.

a. Public Laws and Executive Orders.

(1) Executive Order 12770, Metric Usage In Federal Government Programs.

(2) Metric Conversion Act of 1975 (Public Law 94-168) as amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100-418).

b. Federal Acquisition Regulations (FAR).

(1) Federal Acquisition Regulation 3.104

(2) Federal Acquisition Regulation 15.303

c. Department of Defense.

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(1) DD Form 1391, Military Construction Project Data

d. Department of the Army

(1) AR 5-22, The Army Force Modernization Proponent System

(2) AR 71-32, Force Development and Documentation

(3) AR 350-19, Army Sustainable Range Program

(4) AR 420-1, Army Facilities Management

(5) AR 700-127, Integrated Product Support

(6) AR 700-142, Type Classification, Materiel Release, Fielding, and Transfer

e. U.S. Army Corps of Engineers.

(1) ER 1110-1-8158, Corps-Wide Centers of Expertise Programs

(2) ER 1110-345-700, Design Analyses, Drawings and Specifications

(3) Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment / Establishment of Centers of Standardization (COS)

4. General.

a. Description. Facilities standardization is a formal process for developing requirements and designs for facilities per AR 420-1 and as documented by specific facilities DA Standards which will be used as the basis to develop as Department of the Army (DA) standards designs for construction. This process consists of:

(1) Developing functional and technical facility requirements based on input from the Army proponent agencies, OACSIM, and USACE other Army Facility Design Team (FDT) members.

(2) Developing, coordinating, approving, and implementing DA standard designs based on the Army's requirements.

(3) Using approved DA standard designs to develop project specific design and construction documents for Army Facilities.

(4) Monitoring the use of, seeking feedback, reviewing and updating approved DA standard designs to ensure their continued technical quality and responsiveness to Army requirements.

b. Definitions. The term “standardization” is often understood to mean complete duplication of a facility’s design that is site adapted from site to site. However, standardization of a facility’s design may be accomplished through several methods, as allowed by ER 1110-345-700.

(1) Standard designs can include drawings and/or criteria that delineate space allocations, functional layouts, and the basic configuration of the facility, and serve as guides in developing specific design and construction drawings.

(2) Adapt-build models can include drawings, specifications, and design analysis that are sufficient in detail to serve as contract documents after modifications are made for site-specific requirements.

5. Objectives.

a. Background. The Vice Chief of Staff, Army (VCSA) notified Commanders of the Army Commands (ACOM) that distinct benefits accrue to the Army by standardization, including the use of standard facility designs. The VCSA also indicated to the Chief of Engineers (COE) that the Army cannot afford the luxury, nor are there justifiable reasons to design and construct unique facilities for each Army installation, and that the COE should increase the use of standard facility designs in the Army’s Military Construction (MILCON) programs. The VCSA emphasized that the facilities standardization effort should include the appropriate participation of DA Staff Offices, Army Commands (ACOM), and other DA organizations having specific facility proponent responsibilities.

b. Facilities Standardization Objectives.

The overall objective for Army facilities standardization is to achieve savings and benefits in the programming, design, and construction of Army facilities of excellence. Specifically, the objectives include, but are not limited to the following:

(1) Increased credibility with the Congress through more consistent construction program development.

(2) Increased consistency in facility types with equal treatment among ACOM, installations, and users.

(3) Improved master planning and site development activities, improved design quality, and the promotion of design excellence.

(4) Simplified programming activities.

(5) Simplified design and construction project management, reduced design costs and time, reduced construction costs and time, and reduced change orders during

construction.

(6) Increased customer satisfaction through improved responsiveness to the user's functional and operational requirements.

c. **Army-wide vs. Geographical Approach.** Uniformity of standard designs Army-wide is the desirable goal and should be achieved wherever possible. However, certain factors may preclude the achievement of this goal in some cases, such as the following:

(1) Operational requirements may vary between CONUS and OCONUS military units.

(2) Construction materials and methods as well as construction labor markets vary between CONUS and OCONUS geographical areas and regions. The Buy American Balance of Payments Program may influence material, components and systems selections.

(3) Host Nation building codes, construction regulations, and construction practices in OCONUS locations vary from CONUS building codes, regulations, and practices.

d. While standard designs have Army-wide applicability, allowable regional variations may be documented within the standard design to accommodate the factors listed above. Any regional variation beyond those noted in the standard design will need to be coordinated with the FDT, and if determined to be in conflict with the standard design, will need to be submitted for adjudication via the waiver process.

e. In each case, when an Army-wide standard design is developed, the DA standard design will be adapted to integrate the technical design and construction requirements imposed by various Host Nation governments, but shall maintain the functional characteristics documented within the standard design.

6. Organizational Structure.

a. **DA Facilities Standardization Committee.** Per AR 420-1 Facilities Management, the Army Facilities Standardization Committee (AFSC) is responsible for the overall Army Facilities Standardization program. It directs the activities of the Facility Design Group (FDG), the Technology Standards Group (TSG), and the various Facility Design Teams (FDTs), and reviews Army Standards (AS), Army Standard Designs(SD) and Waivers to AS and SD.

(1) The DA Facilities Standardization Committee is chaired by the Assistant Chief of Staff for Installation Management.

(2) The POC on the DA Facilities Standardization Committee should be familiar with the programming and operational requirements of Army facilities. For this reason, the POC from a DA Staff office will normally be the same person who represents that office on the Construction Requirements Review Committee (CRRC). Each POC may be supported by programming, planning, and technical resources from their respective DA Staff office or MACOM, or any other Army functional or operational expert as required.

b. Facility Design Teams (FDT) FDT membership is composed of core or standing members (e.g., DAIM-ODC, DAIM-ODO, G-3(CIR), HQ IMCOM (IMPW), and the designated COS for the facility type) and subject matter experts (SMEs) as determined by the FDT Co-Chairs.

(1) The composition of each (FDT) will depend on the facility types to be standardized. As a minimum, each Subcommittee will consist of representatives from the DA Staff office and representatives from the DA Staff office and MACOM having facility proponent responsibility. In addition, members may represent subordinate commands, Army installations or user organization, and other activities involved with the type of facility. The DA Facilities Standardization Committee members will designate representative for membership on each Subcommittee, as appropriate. For the purpose of decision making, the Subcommittees will be chaired by representatives from the DA Staff offices or MACOM that are the proponents for the facility types, or by Army functional and operational experts designated by the DA Staff or MACOM.

(2) Each FDT will be supported both administratively and technically by a Center of Standardization (COS) which is a USACE operating MSC or district assigned to develop specific DA standard designs and accomplish other functions of a COS in accordance with ER 1110-1-8158. In most cases, the COS will be the only USACE organization that is actively involved with the FDT. Exceptions to this include HQUSACE participation and where a USACE organization has been designated as the facility type proponent.

7. Responsibilities and Activities.

a. DA Facilities Standardization Committee. In accordance with AR 420-1, the primary responsibilities of the DA Facilities Standardization Committee are to provide DA level unity to the facilities standardization process, and to recommend policy and provide advice for the facilities standardization activities. Specifically, these responsibilities and activities include, but are not limited to the following:

(1) Define the objectives, and recommend the directions, for facilities standardization efforts which reflect current Congressional, Department of Defense (DoD), and DA issues.

(2) Determine candidate facility types for standardization.

(3) Recommend appropriate adjudication of issues arising out of the development of Army standard requirements.

(4) Recommend approval DA standards for Army-wide or geographical use.

(5) Provide recommended policy and guidance for the standardization process.

b. FDT for Facility Types.

(1) In accordance with AR 420-1, the primary responsibilities of each FDT are to develop the functional and operational requirements and to coordinate with the supporting COS in the development of the proposed DA standard design for the selected facility type. Specifically, these responsibilities and activities include, but are not limited to the following:

(2) Provide the proponent and user perspective in the development of the proposed DA standard designs. Establish specific working teams as required.

(3) Identify the appropriate sources of input for the development of the functional and operational requirements for the facility type, e.g., appropriate Army installations or user organizations, Army functional and operational experts, or other activities involved with the type of facility. Obtain and coordinate the input from the identified sources, and ensure that comments from these sources are fully considered during the development of the proposed DA standard design.

(4) Develop and document the functional and operational requirements for the facility type, consistent with the guidance provided by the DA Facilities Standardization Committee.

(5) Provide the functional and operational requirements for the facility type to the supporting COS selected to develop the standard design. Coordinate with the supporting COS on the appropriate level of standardization and geographical application of the proposed DA standard design for consistency with the guidance provided by the DA Facilities Standardization Committee.

(6) Identify those elements of the DA standard design that are mandatory and those elements that are optional, and ensure the final DA standard design clearly reflects these mandatory and optional elements.

(7) Monitor the development of the proposed DA standard design. Review the proposed DA standard design and, upon acceptance by a consensus of the FDT, recommend approval by the COE for Army-wide or geographical use.

(8) Monitor and evaluate the approved DA of standard design for responsiveness to Army functional and operational requirements.

(9) Develop recommendations for updating, revising, or redeveloping the approved DA standard design when appropriate.

c. Centers of Standardization (COS).

(1) The primary responsibilities of the supporting COS are to provide administrative and technical support to the FDT for the specific facility type, track and monitor the use of the standard, evaluate the standard for technical adequacy and responsiveness to user requirements, and provide technical support on an as needed basis to other USACE design elements.

(2) Coordinate with the FDT for the selected facility types and, if appropriate, provide design and engineering input to the development of the functional and operational requirements.

(3) Develop a schedule and arrange for meetings of the FDT for the specific facility type, coordinate with other FDT and prepare and publish minutes of all meetings with ten days after the meeting date. All proposed meeting dates and places must be coordinated with HQUSACE to allow the consolidation of meetings with other FDT to ensure that travel times and costs are minimized.

(4) Develop a proposed standard design or designs for the specific facility type. Coordinate the development of the proposed standard design with the FDT for the specific facility type. Ensure that all proponent and user comments are fully considered and documented during the development of the proposed DA standard design. Development of the DA standard design may be accomplished by either in-house USACE personnel or by Architect-Engineer (AE) contract.

(5) Transmit the proposed DA standard designs for coordination with the USACE Committee and HQUSACE. Incorporate the technical input from these sources into the proposed DA standard design.

(6) Monitor and evaluate the DA standard design for functional and technical performance.

8. Facility Types for Standardization.

The selection of a facility type for standardization is by the AFSC IAW AR 420-1, Appendix G.

9. DA Standard Design Development.

Procedures for developing DA standard designs are contained in Appendix A.

10. DA Standard Design Implementation/Use.

a. Authority. When recommended by the DA facilities Standardization Committee and authorized by the COE, a DA standard design will become mandatory for the selected facility type, and will be used Army-wide or within the intended geographic area for planning, programming, and design and construction activities.

b. Procedures for Using a DA Standard Design.

(1) Installations, or USACE elements will use appropriate DA standard designs and templates for DD Form 1391, MILITARY CONSTRUCTION PROJECT DATA, during a project's planning and programming phases for a facility type for which a DA standard design has been implemented. USACE element should ensure that installations use DA standard designs DD 1391 templates and all other necessary programming documentation.

(2) Upon receipt of a design directive from HQUSACE for a facility for which a DA standard design has been implemented, the USACE district administering the project shall engage the responsible COS as a member of the PDT. Standard design information is available on <http://mrsi.usace.army.mil/cos/SitePages/Home.aspx>. Execution of the design for an individual facility will follow conventional design procedures with these special instructions added.

(3) Selection of an AE contractor must consider previous experience with the applicable standard design, or in-house design staff should be used.

(4) Building Information Modeling (BIM) shall be used to execute the design. An electronic copy of the final BIM model will be provided to the appropriate COS along with all final design documents (drawings, specifications, bid documents, and design analyses).

(5) The USACE district administering the project design, to the extent allowed by the DA standard design, will tailor the design to the specific requirements of the project. This may include adapting the DA standard design by integrating the design and construction requirements imposed by various Host Nation governments, site design and engineering, and selecting the appropriate options allowed in the DA standard design to address local conditions. Such options may include structural and mechanical design, and the architectural theme. Depending on the level of Standardization represented in the DA standard design, building engineering, material selections, architectural treatment, and other project specific features may also have to be addressed.

(6) Once the DA standard design has been used for an individual facility at a given installation, that design (design and construction documentation) may become the model drawings for subsequent applications of the same facility type at that Army installation or region as appropriate. Subsequent applications may be site adaptations, requiring only modifications for site design and code/criteria updates. Revisions approved and implemented for the basic DA standard design shall be incorporated into the installation specific design, as appropriate.

c. Waiver from the use of a DA Standard Design. Requests for waivers and approval shall be in accordance with AR 420-1.

11. Updating DA Standard Designs.

a. General. Approved DA standard designs will be monitored and evaluated for responsiveness to FDT requirements and for technical adequacy. Revisions will be made when they are determined appropriate by ongoing review and evaluation.

b. Procedures for Reviews and Revisions.

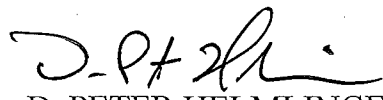
(1) The FDT for each facility type will be responsible for evaluating the responsiveness of the DA standard design to the user's functional and operational requirements. The FDT will monitor facilities built using the DA standard design, evaluate their responsiveness and document the findings.

(2) The supporting COS for each facility type will be responsible for evaluating the technical performance of the DA standard design. The supporting COS will monitor facilities built based on the approved DA standard design (during design, construction and post-construction) for constructability, engineering and technical sufficiency, life cycle cost performance, lessons-learned, technical feedback, and compliance with current design standards and construction criteria. The supporting COS will document the evaluation.

(3) The FDT and the supporting COS for each facility type will coordinate their reviews and evaluations on an ongoing basis. The FDT and the supporting COS may revise the DA standard design when required.

FOR THE COMMANDER:

11 Appendices
(See Table of Contents)


D. PETER HELMLINGER
COL, EN
Chief of Staff

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APPENDIX A

DA STANDARD DESIGN DEVELOPMENT

1. Standard Design Approach.

Once a USACE element has been directed by HQUSACE to be a supporting COS to develop a DA standard design, that COS will be the primary influence in the execution of the DA standard design. The selection of a COS will be based on experience or previous experience with the facility type and capabilities in performing the task. Development of the DA standard design(s) for the facility type being standardized will be accomplished in a similar fashion as the development of a conventional project design. A concentrated team effort among all disciplines will be undertaken during development to allow for the most cost effective and energy efficient design possible which meets the functional and operations requirements of the facility type. This team effort must begin at the inception of the development to achieve a comprehensive and coordinated design. Disciplines comprising the team must include, but not be restricted to, architectural, interior design, mechanical, electrical, civil, structural, fire protection, and site planning.

2. Coordination.

Coordination for functional adequacy and technical review during the development of a DA standard design will be accomplished by the supporting COS as follows:

- a. Establishment of functional and operational requirements will be coordinated with the FDT for the facility type being standardized. HQUSACE will assist the COS in making the initial contact with the appropriate FDT.
- b. Coordination with the FDT for the facility type being standardized is required during all phases of the development. This coordination is required to ensure that all functional and operational requirements of the facility type are being addressed. Review times and procedures will be established at the outset of the effort; however, a minimum review time of 30 days (excluding mailing time) is required at each phase. Reviews should normally follow the conventional Military Construction Army (MCA) phases of concept, pre-final, and final.
- c. Coordination is required at each major phase of development, i.e., concept, pre-final, and final to ensure applicability and constructability of the DA standard design throughout the intended geographical area, i.e., CONUS to include Alaska and Hawaii, Europe, and the Far East, and to ensure that all architectural, engineering, and technical aspects are appropriate.
- d. Coordination of the final document is required with all DA facilities Standardization Committee POCs. This coordination is required to ensure that all voting members of the DA Facilities Standardization Committee are informed.

3. Functional and Operational Requirements.

The FDT for the facility type being standardized will be the primary influence in developing the world-wide functional and operational requirements for the facility type. However, the COS will be required to ensure that all appropriate requirements are identified and, as necessary, provide design and engineering input of the development of the functional and operational requirements. Functional and operational requirements will include, but not be limited to:

- a. The programmed location of the facilities and the applicable geographical area(s) for which the DA standard design must be developed.
- b. The world-wide functional and operational activities, personnel, and associated equipment requirements of the facility and any special requirements applicable to specific geographical areas.
- c. Space and area requirements and their functional relationships, including different scopes of the same facility types that may be required.
- d. Site and building arrangement requirements.
- e. Interior design requirements including building related interior design and customer funded interior furnishings.
- f. Architectural and aesthetic considerations for various anticipated locations.
- g. Physical and electronic security, and anti-terrorism considerations.
- h. Information systems and communications requirements.

4. Initial Design Approval.

Initial approval of the DA standard design package must be obtained from the FDT for the facility types being standardized and the USACE Committee.

- a. The FDT for the facility type being standardized must approve the DA standard design from a world-wide functional and operational perspective. Upon completion and acceptance by the Subcommittee for the facility type being standardized, the supporting COS will make available the proposed DA standard design to other USACE elements world-wide, or within the geographical areas for which the DA standard design package applies.
- b. The USACE Committee approval of the DA standard design package will be based on the fact that it is appropriate world-wide, or for the intended geographical area, or areas, from an architectural, engineering, and technical perspective.

5. Final Design Approval.

The DA Facilities Standardization Committee will recommend approval or disapproval of the proposed DA standard design package to the COE. This recommendation will be based on the

recommendations of the FDT for the facility type being standardized and the USACE Committee. The final approval of the DA standard design will be made by the COE. Once approved by the COE, the use of the DA standard design package will be mandatory for the specific facility type in the intended geographical area(s) for projects in the MILCON programs.

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APPENDIX B

STANDARD OPERATING PROCEDURE USACE-COS-01

Center of Standardization Fee Schedule

1. Purpose.

This Standard Operating Procedure defines the method for fee structure determination and budgeting between a Geographic District and the Center of Standardization (COS) for services necessary in the development of IDIQ task order or design for a given standard facility. It is intended that the fee schedule published in this SOP be considered a fixed, non-negotiable rate in order to ensure consistent application by all COSs, and to avoid the need for negotiation between the COS and the Geographic District. The exception will be for Adapt-Build Designs (100% design products), which the estimate herein represents a beginning proposal to be negotiated with the eventual designer-of-record (D-O-R). Unique projects or changes in initial conditions will be considered on a case by case basis, and negotiated between the COS and the Geographic District as necessary.

2. References.

- a. AR 420-1, Army Facilities Management
- b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06
- c. Army Facilities Standardization Program Charter Approved by the Army Facilities Standardization Committee on 24 May 2006

3. Authorities.

This SOP is established as a baseline reference for fee structures required by the Centers of Standardization services IAW reference 2.b. above and the COS Program Management Plan.

4. Roles and Responsibilities

- a. The Center of Standardization will:
 - (1) Ensure open communication with the geographic district PM
 - (2) Provide a P&D estimate for required services based upon the fee schedule provided herein.
 - (3) Provide a Design During Construction (DDC) estimate for the required level of services post award based upon conditions of the job and the acquisition strategy employed. The typical DDC fee structure for a Design-Build (D-B) procurement is provided herein. Design-Bid-Build (D-B-B) procurements will require normal DDC allocation. If executed by COS District, expect the COS DDC to amount to 0.3% of the facility construction cost.

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b. The Geographic District will:

(1) Initiate coordination with the Center of Standardization upon receipt of the initial project directive.

(2) Provide specific information related to the project that may affect its development.

(3) Furnish required P&D and DDC funds to ensure execution of the project within the agreed upon design and construction schedule.

(4) Transfer funds in accordance with Standard Operating Procedure USACE-COS-02.

5. Processes and Procedures.

a. Fees for COS involvement in contract document preparation, and pre- and post award compliance reviews will be based upon the rates in the fee structure table below.

b. The rates indicated are for each specific facility contract action or task order, e.g. for a project with multiple standard design facilities, a separate fee shall be applicable for each facility type.

c. COS fees do not include effort for any of the responsibilities required by the geographic districts in accordance with SOP USACE-COS-03.

Table B-1: Current P&D Rates for COS RFP Development Activities¹			
ACTIVITY			TOTAL FEE
COS RFP Development, Advertisement, Eval & Awd ² : 'C'-Type Contract			\$170,000
COS RFP Development, Advertisement, Eval & Awd ² : Task Order			\$140,000
COS RFP Development / Geographic District Advertisement, Eval & Awd ³			\$85,000
COS Review of Geo District RFP, Geo District Advertisement, Eval & Awd ⁴			\$55,000
Construction Rates for COS Post-Award Activities			
ACTIVITY			TOTAL FEE
COS Compliance Review for D-B Project ⁵			\$36,000
COS Coordination for Adapt-Build / D-B-B Project			Negotiable ¹⁰
P&D Rates for COS Compliance Review of Adapt-Build Designs			
ACTIVITY			TOTAL FEE
COS Compliance Review ⁶			\$36,000
P&D Rates for D-B-B Solicitations Using COS Adapt-Build Model ⁷			
	Design Cost Formula	EXAMPLE PROJECT PA	EXAMPLE FEE
D-B-B Facility Design & Award Fee ⁸	$((4.433359 * (\text{SQRT}(\text{PA}/1000)) + 0.020188 * (\text{PA}/1000)) * 1000) * 0.75 * 0.75$	\$10,000,000	\$363,000
D-B-B Site Design & Award Fee ⁹	$((4.433359 * (\text{SQRT}(\text{PA}/1000)) + 0.020188 * (\text{PA}/1000)) * 1000) * 0.25$	\$10,000,000	\$162,000

Table B-1: Current P&D Rates for COS RFP Development Activities

Table Notes:

¹ Applicable to RFPs with a Design Code 7 (Design-Build).

² Includes COS attendance at the design charrette, RFP development, evaluation of proposals by the COS, and award of contract or task order in accordance with established COS acquisition strategy.

³ Assumes RFP development by COS, but delegation of authority by COS to the Geographic District (GD) to advertise, evaluate proposals, and award the contract or task order in accordance with established COS acquisition strategy. Fee includes COS attendance at the design charrette

and preparation of RFP, bidder inquiry assistance, and participation in the proposal evaluations as required.

⁴ Assumes delegation of authority by COS to the Geographic District (GD) to prepare RFP, advertise, evaluate proposals, and award the contract or task order in accordance with established COS acquisition strategy. Fee includes COS attendance at the design charrette, review of the GD prepared final RFP, back-check of the annotated review comments, bidder inquiry assistance, and participation in the proposal evaluations as required.

⁵ Includes COS participation in the pre-construction conference, review of two design submittals per discipline for compliance with the RFP/standard design, back-check of the annotated review comments, and assistance with RFIs during the construction process. This item does NOT include funding for any contracting actions that may be necessary by the COS. If KO responsibility is retained by the COS, a separate allocation of S&A funding shall be negotiated between the COS and GD, and provided by the GD accordingly.

⁶ COS fee to ensure compliance with the standard design functional and operational requirements (the need for technical review of the D-O-R's product will be left to the discretion of the GD) if the D-B-B facility design is developed by the GD or an A-E. The fee includes COS participation in the pre-design conference, review of two design submittals per discipline for compliance with the standard design, back-check of the annotated review comments, and assistance with questions during the design process. This item does NOT include funding for any contracting actions that may be necessary by the COS.

⁷ Assumes COS, GD, or A-E development of Design-Bid-Build solicitation predicated on COS Adapt-Build solution. The design + award fee is an estimate with the final fee contingent upon the negotiated design fee with the D-O-R, and the split of responsibilities established between the COS and the GD for solicitation and award. Construction solicitation shall utilize established COS MATOC/SATOC tools if they exist.

⁸ The indicated design cost formula includes a 25% reduction in the HQ USACE established formula for vertical design predicated on the assumed use of an existing A-B model. This percentage may require adjustment for first time applications of the COS A-B model in a given region, or development of a previously un-modeled option within the standard design.

⁹ The indicated design cost formula assumes a typical site design effort equal to 25% of the total design effort. This percentage may require adjustment for unusual site conditions or projects with extensive site improvement. The indicated site design fee assumes inclusion of topographic survey and geotechnical exploration.

¹⁰ The baseline amount required for COS post-award coordination is \$5000. This base amount will be used as seed funding for routine RFIs and initial coordination with an area/resident office regarding standard design issues. The base amount will be supplemented with additional funds, as negotiated between the COS and GD, based on the intricacies and issues associated with a specific project and the actual amount of COS participation required.

APPENDIX C

STANDARD OPERATING PROCEDURE USACE-COS-02

Center of Standardization and Geographic District Funds Transfer/Flow

1. Purpose.

This Standard Operating Procedure defines the method for transferring funds between a Geographic District (GD) and the Center of Standardization (COS) for services necessary in the delivery of a given standard facility(s).

2. References.

a. AR 420-1, Chapter 4 Army Military Construction and Nonappropriated-Funded Construction Program Development and Execution

b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authorities.

This SOP is established as a baseline reference for funds transfers/flow required by the Centers of Standardization and Geographic District services IAW reference 2.b. above and the COS Program Management Plan.

4. Roles and Responsibilities.

a. The Center of Standardization will:

(1) Coordinate funding requirements with Geographic District

(2) Receive funding from Geographic District for labor, S&A and non-labor actions.

b. The Geographic District will:

(1) Receive all project funds & set up P2 project

(2) Form Project Delivery Team (PDT) with COS members and COS/Geographic District funding processes documented in Project Management Plan (PMP).

(3) Transfer funds to COS for labor, S&A and non-labor actions.

5. Processes and Procedures.

a. Funding:

(1) All project funds will be sent directly to the GD.

(2) All standards & criteria funds will be sent directly to the COS.

(3) GD will MIPR funds to COS for labor, S&A and non-labor actions.

b. P2 Project:

(1) GD will set up a single P2 project per DD1391.

(2) Project Manager will be in the GD, which will be the P2 project owning organization.

(3) COS will set up a P2 Project for their Standards & Criteria funding.

(4) Project budget and schedule updates responsibilities will be coordinated between the COS and the GD and will vary depending on the complexity of the project(s). In situations where updates would affect other schedules, it may be best to utilize centralized approach. In situations where multiple districts can update the budget without affecting multiple schedules, it may be best allow them access to update the database. This coordination and determination of which method to use will be documented in the PMP.

c. CEFMS

(1) When GD awards a GD contract as allowed by the COS (COS contracts not established): All CEFMS/SPS/RMS responsibilities will reside with Geographic District.

(2) When the COS awards a COS contract (COS contracts established): COS will enter contract and task order award in COS District's SPS & GD's CEFMS. The GD will receive funds and prepare the PRAC for contract and flat rate S&A and provide a copy of the PRAC to the COS District. The COS District's Contracting Officer will be provided access to the GD CEFMS database and obligate the construction contract and the funds will be obligated in the GD CEFMS database.

d. COS Funds for Labor and Non-Labor Activities

(1) MIPRs for labor are the preferred method. However, in certain situations it may be more beneficial to use cross charging and the GD may utilize this option as necessary.

(2) S&A Activities will be funded via MIPR from GD to COS. However if it is determined that cross charging will be more beneficial in certain cases, the GD may utilize this option.

(3) These options will be coordinated between the COS and GD and will be documented in the PMP.

(4) Travel – MIPR from GD to COS.

APPENDIX D

STANDARD OPERATING PROCEDURE USACE-COS-03

Role of the Geographic Districts in Projects Executed With Centers of Standardization

1. Purpose.

This Standard Operating Procedure will serve to identify roles of the Geographic District with respect to executing a project within their AOR in coordination with a Center of Standardization as a member of the Project Delivery Team (PDT).

2. References.

- a. AR 420-1, ARMY FACILITIES MANAGEMENT
- b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06
- c. Standard Operating Procedure USACE-COS-01, Center of Standardization Fee Schedule

3. Authority.

This SOP is established to define the roles of the Geographic Districts in conjunction with assigned COSs, IAW reference 2.b. above and the COS Program Management Plan. Supporting authority is conveyed by directives and policy memorandums governing the Army Facilities Standardization Program (AFSP) in support of Army Transformation dated 24 May 2006 and AR 420-1 Army Facilities Management (Appendix G Facilities Standardization) dated 12 Feb 08 specifying the waiver process for the Army Facility Standard Program.

4. Roles and Responsibilities.

The COS will provide Army Standards or an Army facility standard design for pre-design planning efforts, design development, award and construction of facility types under their responsibility as identified in reference 2.b. above. The Geographic District will continue to design the site improvements for standard facilities and any non-standard facility portions outside the agreed upon demarcation points and will award as a separate contract when appropriate. In order for these activities to operate seamlessly, the Geographic District will be responsible for the following duties related to projects executed in coordination with a Center of Standardization:

- a. All PM activities to include programming, scope coordination issues, waivers, installation/command/user coordination, and maintaining project schedules and budgets (Planning & Design (P&D), COS and geographic district requirements, post award).
- b. The PM shall lead planning charrettes and ensure charrette schedules are coordinated with the COS staff availabilities as well as ensure that critical team players/users (i.e., site

designers) are invited to attend and participate in the charrettes.

c. Notify the COS when design directives are issued and provide a copy of each directive to the COS.

d. All P&D funds are provided directly to the Geographic District from HQUSACE. The Geographic District Project Manager shall provide P&D funds as outlined in reference 2.c.) to the COS(s) within 5 working days from issuance of the project design directive (Code 6, 7, T).

e. COS develop and maintain a current PMP to address at a minimum the project scope, schedules, funding, organizational responsibilities, acquisition strategy, quality assurance, and management of changes to the project. Include COS(s) as signers of the PMP.

f. Provide preliminary project site information (i.e., Installation Master Plan and IDG) during the project planning stages to the COS if available.

g. Provide fire hydrant flow test data, utility information and connection points during the design phase of the project to the COS.

h. Ensure proper review and coordination of construction/constructability issues during planning charrettes.

i. Check cultural and natural resources' master plan for suitability of project site.

j. Ensure all environmental clearances have been obtained prior to award.

k. Coordinate all HTRW (Hazardous, Toxic and Radioactive Waste) issues. Ensure site is clean and/or coordinate mitigation. Provide site characterization letter to COS.

l. Coordinate and execute demolition contract for existing infrastructure and facilities if required.

m. Request information from the COS (building footprints and hardstand/service yard square footage, POV parking, storm drainage detention, etc.) to help define limits of topographic survey as necessary. Contract for and provide the topographic survey to the COS prior to the design charrette for incorporation into the design package.

n. Obtain standard facility loading requirements from the COS prior to performing geotechnical investigation. Provide the results of the geotechnical investigation to the COS prior to the design charrette for incorporation into the design package.

o. Responsible for site and infrastructure design and all related coordination with the COS and the standard facility design package. Coordinate and develop demarcation matrix with the COS to identify boundaries between site work and facility contracts and include in respective task orders.

p. Responsible for the solicitation and award of the construction contract to perform the

required site work in support of the COS facility when the site work package is not part of the standard facility package.

q. Prepare the total project construction government estimate incorporating the COS facility cost.

r. Provide site and infrastructure design documents to COS for review and conduct interim review conferences if needed. Review all project design packages to take advantage of local construction practices and knowledge of existing infrastructure and site conditions.

s. Coordinate the acquisition strategy(ies) with the COS(s) during the development of the PMP.

t. If scope reductions are necessary during the project life cycle, the COS shall be notified immediately. If scope reductions involve modifications to the Army Standard or Standard Design an approved waiver shall be required prior to award.

u. Depending on the acquisition strategy, the contracting district will issue solicitation amendments as necessary in coordination with the COS. If amendments involve modifications to the Army Standard or Standard Design an approved waiver shall be necessary prior to award.

v. During Construction, all changes to the facility will be coordinated with the COS before execution. If change orders to the facility involve modifications to the Army Standard or Standard Design an approved waiver shall be necessary prior to modification execution.

w. During Construction, in coordination with the contractor, ensure completion of documentation and validation of final sustainable design and development rating.

x. The Geographic District Project Manager shall provide post-award Design During Construction (DDC) funds as outlined in reference 3c) to the COS(s) within 5 working days after contract award.

y. Invite the COS(s) to scheduled coordination/review meetings with priority placed on the initial post-award design kickoff meeting.

z. Invite the COS(s) to construction and post occupancy evaluations.

aa. Consolidate as-built documents, verify compliance to the contract requirements and forward to user. An electronic set of the as-builts shall be sent to the COS(s).

bb. Perform all construction management services in coordination with the COS as necessary.

cc. Identify liquidated damages, construction duration and phasing requirements, and coordinate with the COS as necessary.

dd. Ensure Value Engineering (VE) of project specific elements is performed.

5. Process/Procedure.

Districts should follow their previously established execution procedures to the extent possible while following the guidelines established under the MILCON Business Process (formerly MILCON Business Process - MT). Districts shall utilize the COS(s) as the engineering PDT member for the development of designs and contract packages related to standard facilities. Depending on the acquisition strategy and the available acquisition tools, either the Geographic District or the COS will advertise, negotiate and award a contract for the design and/or construction of a standard facility.

6. Typical List of Deliverables & Charrette Checklist.

a. Preamble – The purpose of this document is to provide clear direction and define responsibilities between the Center of Standardization (COS) and the Geographic District (GD) in the execution of the featured project.

b. Definitions:

(1) Site Development/Civil Engineer - The GD is responsible for providing civil engineering services for the project. The GD is responsible for acquiring topographic and geologic surveys; defining existing utility information, proposed utility upgrades, and connection points; coordinating and executing demolition contracts; and responsible for all design and construction aspects related to the site and infrastructure. In addition, the GD is responsible for providing a site layout plan showing space for building pads, organizational vehicle hardstand, service yard, storm drainage solutions/systems, Anti-Terrorism/Force Protection (AT/FP) minimum set-backs, and site amenities such as trash dumpster pads and aprons, parking areas, sidewalks, fencing, landscaping, etc. It is the GD's responsibility to determine if the site and infrastructure design should be provided by in-house forces, A/E services, as defined in the site contractor's task order, or a combination thereof. Points of demarcation will be coordinated between the COS and the GD, and provided in the respective task orders. (See attached Demarcation Matrix).

(2) Utilities - Includes water, gas, electric, communications and sewer. The estimated demands on the existing infrastructure will be provided by the COS to the GD for incorporation into the respective task order. The COS task order shall include a time line in which final utility demands and points of connection to the building are provided to the site contractor for incorporation into the site design.

(3) Building Pad - A defined area within the project site where the actual building(s) shall be located. Typically, the building pad will fall within the AT/FP minimum set-backs. The GD and the site design-build contractor are responsible for site development within the building pad (i.e., demolition, clearing and grubbing, grading, utilities, etc.); therefore, it is critical that proper coordination take place between the COS and GD to ensure that the site development responsibilities are addressed in the site contractor's task order. The COS and GD will ensure that the building(s) will fit within the building pad. For design-build

contracts, the building design-build contractor is responsible for the final design and shape of the building. (See Building Footprint below).

(4) Charrette - Per the National Charrette Institute - “Charrette is a collaborative planning process that harnesses the talents and energies of all interested parties to create and support a feasible plan that represents transformative community change”.

(5) Building Floor Plan - A two-dimensional representation of what the building will look like in plan that can be used to properly locate the facility on the site using the established coordinate system. This will include, at a minimum, a finished plan of the first floor to show all the entries (including stoops) and all the required spaces delineated by partitions or other structures as necessary.

(6) Building Entrance -The primary access point into the building. This may also be referred to as the Main Entrance. The direction which the building must face shall be determined by the conclusion of the design charrette.

(7) Building Footprint - A two-dimensional geometric shape laid out on the site plan to show that the building square footage called for in the DD 1391 document will actually fit on the proposed site. Note that this is not a floor plan or the final building configuration. The building design-build contractor shall not be constrained to adhere to the shape of this building footprint. The building design-build contractor shall design a building and create a building floor plan that fits within the building pad and meets the minimum requirements of the task order.

(8) AT/FP - Anti Terrorism/Force Protection (See UFC 4-010-01) requirements must be incorporated in the overall site development plan. In most cases, it is anticipated that minimum AT/FP stand-off distances will be to the perimeter of the building pad. If adequate standoff distance to allow for the use of standard construction methods cannot be provided, the GD must immediately inform 1) the planning charrette team so the project may be properly budgeted, and 2) the COS to allow for proper mitigation into the design of the building.

(9) LEED - The PDT shall coordinate Leadership in Energy and Environmental Design (LEED) requirements that considers both site and facility features in order to meet the desired LEED certification level.

(10) COS Contractor Responsibility - The building contractor (COS) is responsible for all building work including interior utility systems, HVAC and control systems, fire protection, mail access area (such as Mail Kiosk), and building force protection measures to ensure a complete and usable facility. Responsibility for connection between interior utility systems (COS contractor) and exterior utility lines (Site contractor) shall be coordinated by the Project Manager and addressed in the respective task orders.

c. Design Charrette

(1) COS Deliverables and Responsibilities

(a) Building Pad -The COS shall coordinate with the GD to determine the general direction the building should face within the building pad. The GD and COS shall coordinate points of connection for utilities. (See attached Demarcation Matrix).

(b) Sidewalks - The COS shall coordinate with the GD the general location of sidewalks leading to the building and parking areas, if practical. Where the COS task order requires development of the floor plan, exact locations of sidewalks cannot be established. Therefore, coordination between the COS and GD will be necessary to determine the most logical location of sidewalks to allow access from various points around the site to the building pad (e.g., pedestrian street crossings, parking areas, bus stops, adjacent facilities, etc.). During the design charrette, the COS and GD shall work together to define restricted areas and access control requirements. These features shall be addressed in the respective task orders.

(2) Geographic District Deliverables and Responsibilities

Site Validation - The GD shall be responsible for topographic and geotechnical surveys and the layout of the site including building footprints, organizational vehicle hardstand, service yard, POV parking, storm drainage solutions/systems, AT/FP minimum set-back requirements, and site amenities to insure the site has adequate space to house the project.

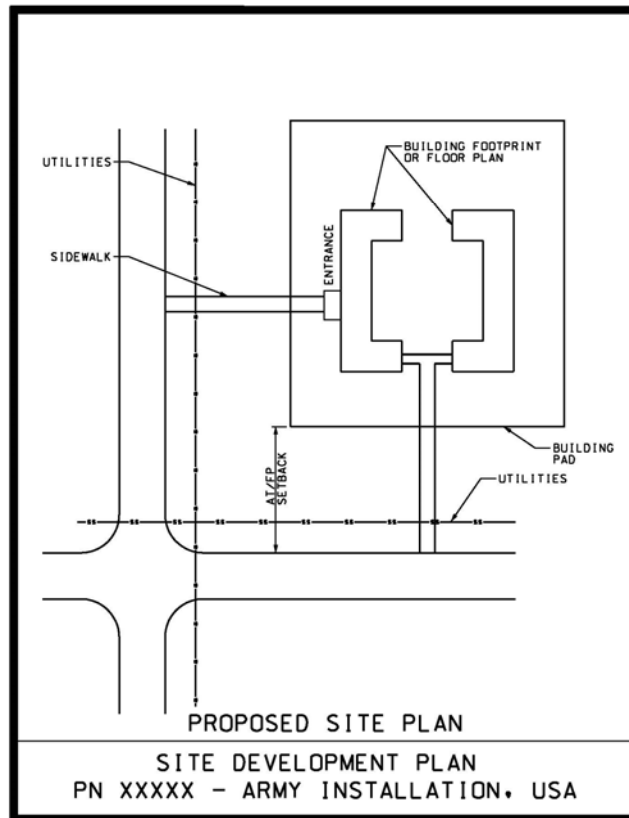


Figure D-1: Example Demarcation Matrix

Table D-1: Example Charrette Checklist		
Item of Demarcation	Site Development Contractor Package Scope/Limit of Work	Building Package Scope/Limit of Work
Site Grading ^{a, b}	Provide site graded to pad elevations shown on Site Development Contractor drawings and per the recommendations provided by the Contractor's Geotechnical consultant. This will include any retaining wall or other site feature required to provide overall site/pad elevations for primary building(s). Positive drainage should be provided within the building pads to prevent ponding or standing water.	Provide foundations, floor slab systems (ground or structurally-supported), and select backfill (non-expansive) required per geotechnical recommendations. Building Contractor will be responsible for ensuring proper compaction under buildings and service yards per the recommendations provided by Contractor's Geotechnical consultant.
Roads ^c	Site Development Contractor will provide all roadways.	NA
Permits ^e	Site Development Contractor will obtain: <ul style="list-style-type: none"> • Overall SWPPP • Sanitary Tie-in • Water Tie-in 	Building Contractor will obtain any building specific permits for the building. Building Contractor shall be secondary SWPPP permittee.
Storm Water Collection/ Detention ^f	Site Development Contractor will provide storm water collection/detention for overall site in accordance with all federal, state and local regulations; and will reroute existing drainage impacted by construction	Building Contractor to accommodate roof drains to surface splash blocks and/or below grade storm water collection system(s).
Natural Gas ^k	Site Development Contractor shall coordinate with LOCAL GAS PROVIDER for service to the site. Site Development Contractor shall include any incurred costs as part of the Site Development Contractor's Contract.	Building Contractor will coordinate and provide required pressures for meter settings to LOCAL GAS PROVIDER as well as all required elements from the meter inward in the facility.
Domestic Water Distribution ^g	Site Development Contractor will provide domestic water line to the [5'] line and temporarily cap. A water meter will be provided and set in a vault outside the facility.	Building Contractor will take domestic water line from the [5'] line and route within the building through a backflow preventer (located in mechanical room).

Table D-1: Example Charrette Checklist		
Item of Demarcation	Site Development Contractor Package Scope/Limit of Work	Building Package Scope/Limit of Work
Fire Water Distribution ^h	Site Development Contractor will provide the PIV and route fire water line (dedicated line split off the domestic supply) to the [5'] line and temporarily cap.	Building Contractor will take fire water line from the [5'] line and route within the building and required element to provide their fire protection system.
Sanitary Sewer ^j	Site Development Contractor will provide any sanitary sewer element required outside the [5'] line including a cleanout or manhole.	Building Contractor will provide any sanitary sewer element required inside the [5'] line.
Primary Electrical Service ^l	Site Development Contractor will bring electrical primary to the primary side of the transformer windings. Site Contractor is responsible for the transformer, pad, grounding and bollards.	Building Contractor will provide: <ul style="list-style-type: none"> • the load letter • secondary conductors • secondary conduit
Comm. Duct Bank	Site Development Contractor will provide duct bank from the main manhole to the [5'] line and temporarily cap.	Building Contractor will provide duct bank from the [5'] line into the communications room.
Phone Cabling – Copper ^m	Site Development Contractor will provide phone/copper from the communication manhole to the main communications room in the facility and land/terminate on the service entrance termination.	Building Contractor will provide any copper/phone elements required within the facility. Provide service entrance termination hardware.
Data Cabling – Fiber ⁿ	Site Development Contractor will provide cabling/fiber from the communication manhole to the main communications room in the facility and land/terminate on the service entrance termination.	Building Contractor will provide any data cabling/fiber elements required within the facility. Provide service entrance termination hardware.
Cable Television	Local Service Provider to provide service entrance coaxial cable into facility within duct bank installed by Site Development Contractor /Building Contractor package. Local Service Provider will terminate all coaxial CATV cables which are provided by Building Contractor.	Building Contractor will provide outlet locations including backbox, mud ring, and raceway. Building Contractor will provide vertical/horizontal coaxial cable, wire management including, but not limited to, labeling and identification. Building Contractor to provide faceplates for coaxial terminator to be installed by Local Service Provider.

Table D-1: Example Charrette Checklist		
Item of Demarcation	Site Development Contractor Package Scope/Limit of Work	Building Package Scope/Limit of Work
UMCS / EMCS	NA	Building Contractor will provide any cabling/fiber elements, integrating new system information and new software required to connect and integrate new building EMCS for all equipment and systems where cooling capacities are 10 tons and greater into existing UMCS.
Building Identification	Site Development Contractor will provide any building identification required outside the [5'] line.	Building Contractor will provide any building identification required inside the [5'] line.
Sidewalks ^o	Site Development Contractor will provide all sidewalks connecting to adjacent sidewalks and to the building's entrances, POV parking areas, service yards, and organizational vehicle parking hardstand.	Building Contractor will provide building stoops and handicap ramps.
Organizational Parking ^d	Rough grade entire site as noted under "Site Grading." Site Development Contractor to provide access drive to demarcation limit.	Building Contractor will provide the organizational vehicle parking, service yards, and access drives to demarcation limits
Parking Lots	Site Development Contractor will provide all POV parking lots and associated stripping, etc. including lights and associated distribution equipment.	NA
Landscaping ^o	Site Development Contractor will provide all landscaping.	NA
Trash Dumpster ^o	Site Development Contractor will provide the location of the proposed trash dumpster, required screening, and the concrete dumpster pad and apron.	Building Contractor will provide trash dumpster(s) and recycling containers. Building and site contractors will coordinate the finish of the screening material to match the building facade.
Site AT/FP Elements ^p	Site Development Contractor will provide any site AT/FP elements and ensure minimum setback distances are established and maintained.	Building Contractor will provide any required AT/FP elements within the building limits of construction.

Table D-1: Example Charrette Checklist		
Item of Demarcation	Site Development Contractor Package Scope/Limit of Work	Building Package Scope/Limit of Work
Equipment Pads (Condensers, Chillers, etc) ^q	Site Development Contractor shall provide landscaping to screen equipment.	Building Contractor will provide any required equipment pads for equipment to support the facility such as condensers, chiller, etc.
HVAC Distribution Piping	NA	Building Contractor will provide any required above grade or buried distribution piping from exterior equipment or existing utility mains to building.
Oil/Water Separator, grease interceptors ^{r, s}	NA	Building Contractor will provide any required oil/water separators or grease interceptors.
Fencing and gates ^o	Site Development Contractor to provide fencing and gates as required.	Building Contractor will provide fencing and gates associated with TEMF and Brigade HQ SCIFs, when specified.
Sustainability, LEED building/site interface	Responsible for site related portion of combined bldg/site LEED Credits.	Responsible for building related portion of combined bldg/site LEED Credits.
Site/Security Lighting	Site Development contractor to provide all general area, parking, security, and pedestrian lighting outside the Building Limits of Construction line. Except in unusual circumstances, these services will be provided from one or more of the buildings. Site Contractor and Building Contractor(s) will coordinate location and size of services.	Building Contractor(s) shall provide adequate capacity in electrical service to supply outside lighting requirement. These include designated spare circuit breakers and branch circuits extended to the Building Limits of Construction line as coordinated with Site Development Contractor. Provide spare conduit and pull wires in all conduits.

Table D-1: Example Charrette Checklist

Table Notes

The demarcation limits for ([5']) each utility/item of work listed can be modified to satisfy constraints associated with the site and facility type. The individual limits should be discussed with the Geographic District during the design charrette. The final agreed upon demarcation matrix should be included as an appendix in the COS task order and the Geographic Districts' site contract.

^a Topographic Survey - Obtain existing topographic information for initial design/RFP development from the Geographic District (GD). Ensure survey is provided in the proper CAD format (MicroStation or AutoCAD, and correct version) to meet the GD's requirements, and that the GD concurs with the horizontal and vertical datums to be used. Ensure that all survey data sets are provided for TIN generation, if necessary. If there are multiple contracts, additional coordination may be required.

^b Site Grading - Final building pad elevation(s) should be graded to within 14 inches below the established finish floor elevation for all buildings except TEMF. For TEMF, building pad and organizational vehicle parking areas, subgrade elevations should be approximately 16 inches below the established finish floor elevation. The hardstand and service yards for TEMF, COF, and DFAC shall be 12 inches below finished grade. For TEMF, Building Contractor will be responsible for ensuring proper compaction under organizational vehicle parking and access drives. Ensure that finish floor elevations are above the 100-yr flood elevation. Grading shall be in compliance with the Installation Design Guide (IDG), if applicable. Ensure that all accessible routes are in compliance with the Uniform Federal Accessibility Standards (UFAS). Additional coordination will be required if there are multiple contracts.

^c Roads And Pavements - New roads required shall be coordinated with the installation Master Planner and others, as applicable. Additional coordination may be required if there are multiple contracts to ensure that pavement interfaces constructed under different contracts are compatible, etc.

^d Organizational Parking - Coordinate all parking requirements with the installation and requirements of TI 800-01, Design Criteria (Table 3-5). Coordination will be required if there are multiple contracts to determine the extent of parking under each contract, demarcation points for lighting, access/service drives, etc. Building Contractor to provide SCIF parking area for Brigade HQs.

^e Permits - Determine permit requirements including, but not limited to, digging permits, special disposal requirements for any hazardous materials, whether or not the installation has a disposal site(s), E&S control, etc. If there are multiple contracts, it will be crucial to determine responsible parties.

^f Storm water Mgmt - Site Development Contractor shall route storm water flow from off-site around service yards and organizational vehicle hardstands. Site Development Contractor shall size system to handle flow from TEMF and coordinate tie-in points. The site development contractor shall direct runoff to a storm drainage structure located off the edge of the hardstand

and service yard to prevent ponding or standing water. Storm water management shall be as required by the state where the installation is located. Determine if a new NPDES permit is required, or if the installation has an existing permit that will be modified. A Storm Water Pollution Prevention Plan (SWPPP), including an E&S Control Plan, will be required for the project even if there are multiple projects and an overall SWPPP is obtained.

^g Domestic Water Distribution - Determine installation or private utility requirements, including details, specifications, meter requirements, backflow prevention, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Note whether the installations desires water meters to be installed within the facility and reading remotely. Ensure sufficient flow/pressure is available.

^h Fire Water Distribution - Determine installation or private utility requirements, including details, specifications, meter requirements, backflow prevention, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Coordinate with the Fire Dept to determine if there are any special requirements for the installation/facility. Ensure that the design is in compliance with the applicable UFC documents, including, but not limited to, fire truck access, fire hydrant locations, etc. Ensure that sufficient flow/pressure is available.

ⁱ Fire Alarm - Coordinate requirements with the installation Fire Department and others, as applicable.

^j Sanitary Sewer - Determine installation or private utility requirements, including details, specifications, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Determine if the existing system has sufficient capacity, whether or not pump stations are required, etc. If pump stations are required, coordinate with electrical to ensure that secondary power is provided, if required.

^k Natural Gas - Determine installation or private utility requirements, including details, specifications, meter requirements, pressure reducers, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Determine if the existing system has sufficient capacity, etc.

^l Primary Electrical Service - Determine installation or private utility requirements, including details, specifications, meter requirements, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Determine if the existing system has sufficient capacity, etc.

^m Comms - Telephone Cabling - Determine installation or private utility requirements, including details, specifications, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Determine if the existing system has sufficient cable capacity, etc.

ⁿ Comms - Data Cabling - Determine installation or private utility requirements, including details, specifications, etc. If privatized, determine if the company will install new lines, if fees are to be paid, etc., or if they will allow the Government's Contractor(s) to perform the required work. Determine if the existing system has sufficient cable capacity, etc.

^o Site Features - Coordinate with installation, IDG, etc., as required.

^p Site AT/FP Elements - At a minimum, designs must comply with UFC 4-010-01. If there are multiple contracts, coordination will be required to determine responsible parties.

^q Equipment Pads (Transformers, Condensers, Chillers, etc.) - Coordinate with installation, IDG, etc., as required. Ensure that equipment locations consider AT/FP requirements as per UFC 4-010-01.

^r Grease Interceptor - Coordinate with the installation and GD to determine applicable code requirements to be considered during design. If the sanitary system is privatized, coordinate with the utility company to determine their requirements.

^s Oil/Water Separator - Coordinate with the installation and GD to determine applicable code requirements to be considered during design. If the sanitary system is privatized, coordinate with the utility company to determine their requirements.

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APPENDIX E

STANDARD OPERATING PROCEDURE USACE-COS-04

Roles of Centers of Standardization Related to Projects Based on Army Standard Designs

1. Purpose.

This Standard Operating Procedure (SOP) will serve to identify roles of the Centers of Standardization with respect to executing projects in coordination with geographic districts as an engineering/contracting PDT member.

2. References.

- a. AR 420-1, Army Facilities Management
- b. ER 1110-3-113, Department of the Army Facilities Standardization Program
- c. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authority.

This SOP is established to define the roles of Centers of Standardization in conjunction with Geographic Districts, IAW reference 2.c. above and the COS Program Management Plan. Supporting authority is conveyed by directives and policy memorandums governing the Army Facilities Standardization Program (AFSP) in support of Army Transformation dated 24 May 2006.

4. Roles and Responsibilities.

The Center of Standardization (COS) will provide Army Standards and/or an Army facility Standard Design for the award and construction of facility types under their responsibility. In order for these activities to operate seamlessly with the efforts of the geographic district on the site work for standard facilities and any non-standard facility portions of any contract, the COS will be responsible for the following duties related to projects executed in coordination with a Geographic District (GD):

- a. Support the execution district PM as an integral member of the Project Development Team (PDT) including, but not limited to 3086 Validations & PDR Development.
- b. Review and coordinate user requests and ensure compliance with MILCON Business Process (MBP) prior to inclusion in any task order, whether design-build or adapt-build procurement.
- c. Provide design services for assigned facilities as necessary.
- d. Provide acquisition services in accordance with current OPORD direction.

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- e. Provide field technical assistance (RFIs, design reviews after award, claims, modifications, EDC) for assigned facilities as necessary.
- f. Ensure consistent implementation and compliance with Army Standards and facility Standard Designs.
- g. Identify and advise when a waiver is required to Army Standards or facility Standard Designs.
- h. Coordinate waivers to facility Standard Designs with the appropriate Army Facility Design Team and HQ USACE, and coordinate waivers to Army Standards with the Army Facilities Standardization Committee (when applicable).
- i. Provide cost information for assigned facility types.
- j. Review and edit RFP documents to ensure user requests and/or selected references from IMCOM approved Installation Design Guides (IDGs) and approved Area Design Guides (ADGs) are relevant and consistent with industry practices and MBP.
- k. Develop and maintain Adapt-Build Models for appropriate facility types.
- l. Initiate construction evaluations to obtain Lessons Learned and ensure that they are properly documented and evaluated in the appropriate record keeping system.
- m. Conduct End-State Technical Reviews to obtain user feedback.
- n. Conduct periodic reviews of assigned Standard Designs to ensure currency.
- o. Maintain currency with applicable specifications, codes, and industry standards with Standard Designs.
- p. Provide quality assurance oversight of all assigned Standard Designs.
- q. Serves as subject matter expert on the content and application of assigned Standard Designs.
- r. If the Adapt-Build product is not completed by in-house USACE resources, the COS shall provide A-E contract management of the facility Design-of-Record activities and ensure functional/operational compliance with the Standard Design.

5. Process/Procedure.

Geographic Districts should follow their previously established execution procedures to the extent possible utilizing the COS as the engineering PDT member for the development of designs and contract packages related to standardized facility types.

APPENDIX F

STANDARD OPERATING PROCEDURE USACE-COS-06

OACSIM, HQIMCOM, HQUSACE and MSC Roles and Responsibilities

1. Purpose.

This Standard Operating Procedure identifies critical OACSIM, HQIMCOM, and HQUSACE roles and responsibilities necessary for establishing and sustaining Centers of Standardization (COS) within USACE.

2. References.

- a. AR 5-22, The Army Force Modernization Proponent System
- b. AR 71-32, Force Development and Documentation
- c. AR 350-19, Army Sustainable Range Program
- d. AR 420-1, Army Facilities Management
- e. AR 700-127, Integrated Product Support
- f. AR 700-142, Type Classification, Material Release, Fielding, and Transfer
- g. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authority.

This SOP is adjunct to the references cited above specific to the establishment, sustainment, management, and oversight of COS and their execution of USACE's role in the AFSP. Authorities for the content of this SOP are conveyed by the references cited above as an interdisciplinary Army program. This SOP provides the foundation for accomplishing critical synchronization and coordination of multi-agency activities that enable the standardization of facilities to meet validated infrastructure and facilities requirements in support of the key decision points of the Army Campaign Plan (ACP). Supporting authority is conveyed by directives and policy memorandums governing the AFSP dated 24 May 2006.

4. Relevant Army Agencies.

Key agencies and critical subordinate elements addressed by this SOP are:

- a. Office of the Assistant Chief of Staff for Installation Management (OACSIM)
(1) Plans and Operations Division (Operations Team)

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(2) Facilities Policy Division (Standardization Branch)

(3) Construction Division (MCA Branch)

b. Office of the Chief of Engineers (OCE)

(1) Installation Integration Team

c. Installation Management Command (IMCOM)

(1) Public Works Division (Master Planning Branch)

d. US Army Corps of Engineers (USACE)

(1) Program Integration Division (PID)

(2) Engineering and Construction Division (E&C)

(3) Combat Readiness Support Team (CRST)

(4) Communities of Practice (CoP)

(5) Regional Integration Teams (RIT)

5. Roles and Responsibilities.

The following roles and responsibilities establish, define, amplify, and otherwise clarify support provided to COS within the context of the AFSP. They provide the foundation for supporting senior Army leadership decisions across all Doctrine, Organization, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF) domains under the overarching Army Force Management Process.

a. Office of the Assistant Chief of Staff for Installation Management (OACSIM):

(1) Plans and Operations Division (Operations Team) (DAIM-ZS):

(a) Provides Facility Design Team (FDT) Co-Chair on facility types assigned to DAIM-ZS.

(b) Participates in other FDTs as required.

(c) Reviews waivers submitted by HQIMCOM and recommended for approval commensurate with the MBP and AFSP objectives/directives.

(d) The Program Coordinator for Readiness and Modernization Support (PC RMS):

- Synchronizes facilities standardization implementation to support the development and preparation of installations as Flagships of Readiness.

- Synchronizes or integrates COS activities with long-range Army plans (e.g., TAP, TAMP, ADPG, ASPG, etc).
- Serves as the principal “military advisor” to COS on Army and Army Staff (ARSTAF) roles, responsibilities, and processes.
- Serves as a member of the OACSIM/IMCOM/USACE Council of Colonels (CoC).
- Serves as a member of the Facility Design Group (FDG).

(e) The PC RMS, as a member of the Army Integrated Logistics Support Executive Council (AILSEC):

- Assures that facilities standards and criteria are considered in all materiel end-item development activities.
- Identifies policies and processes implementing integrated logistics support that ensure facilities and infrastructure impacts are considered in advance of materiel fielding.
- Facilitates synchronization and coordination of facility and infrastructure standards and criteria across all DOTMLPF domains.

(f) Assists COS in determining space allowance quantification algorithms and Facility Category Codes/Facilities Category Groups (FCC/FCG) assignments to support standards and criteria development.

(g) Assists COS in implementing facilities standards and criteria in OACSIM planning and programming systems.

(h) Identifies and coordinates assessments, analyses, and/or studies of stationing implications on facilities standards and criteria.

(i) Serves as a standing member of all Warfighter facility FDTs

(2) Facilities Policy Division (Standardization Branch) (DAIM-FDF):

(a) Chairs the FDG and provides programmatic execution oversight of Facility Design Team (FDT) and COS activities under the AFSP.

(b) Develops and implements policies, processes, and procedures for executing facility standardization.

(c) In coordination with (ICW) the PC RMS, synchronizes and/or facilitates the standardization process, objectives, and outcomes between OACSIM and HQUSACE.

(d) Maintains roster of active FDTs, their development and publication status, and key points of contact for each facility type.

(e) Manages the activation and training of FDTs for facility types that require Army Standards for implementation.

(f) Serves as a standing member of all FDTs.

(g) Serves as an advisory member to the Army Facilities Standardization Committee (AFSC) in its execution of responsibilities under the relevant references cited above.

(h) Serves as an advisory member of the Centers of Standardization Management Board (COSMB).

(3) Construction Division (MCA Branch) (DAIM-FDC):

(a) Assists COS in determining appropriate unit cost for standards and criteria.

(b) Assists COS in assessing project scope and cost and ascertain whether project can be completed within existing authorities, assists in identifying courses of action ICW HQIMCOM to mitigate shortfalls.

(c) Serves as a standing member of all FDTs.

(d) Serves as an advisory member to the COSMB.

b. Installation Management Command (IMCOM):

(1) Public Works Division (IMHC-PW):

(a) MILCON Program Manager:

- Synchronizes programmatic support requirements, policies, processes, and procedures that balance the execution needs of the MILCON, COS, and MILCON business process (MBP) programs.
- Coordinates and adjudicates issues, concerns, or challenges with IMCOM subordinate activities ICW the PC AFSP, PM MBP, or PC RMS.
- Develops or reviews policies or directives regarding MILCON execution ensuring “standard facilities” are provided and meet functional and operational requirements of Army Standards and Army Standard Designs.
- Reviews waivers from IMCOM subordinate activities, determines necessity, and recommends approval when appropriate and commensurate with the MBP and AFSP objectives/directives.
- Identifies IMCOM training or skills requirements necessary for implementing the MBP and COS programs commensurate with the Army Force Structure, ACP and stationing requirements.

- Serves as the principal point of contact to USACE on the COS Program.
- Serves as a member of the OACSIM/IMCOM/USACE CoC.
- Serves as a member of the FDG.
- Serves as a advisory member of the COSMB.

(b) Master Planner:

- Manages IMCOM implementation of Installation Design Standards.
- IMCOM principal for Installation Design Guide/Area Development Guide (IDG/ADG) execution.
- Conducts periodic assessment of IDGs to ensure that the level of detail required by IDGs are executable, affordable, and do not compromise Army savings, expedited delivery, or expectations for Army facilities.

c. US Army Corps of Engineers (USACE):

(1) The Chief, Engineering & Construction Division (C/E&C):

(a) Chairs the COSMB and USACE representative on the Army Facilities Standardization Committee (PC AFSC).

(b) Provides command oversight, direction, and leadership of the facilities standardization mission area for the Chief of Engineers in direct coordination with the Director of Military Programs.

(c) Reviews and approves COS Program components of USACE policies, processes, and procedures in support of MBP.

(d) Reviews and coordinates HQUSACE notification of Army Standard Design or Standard Criteria (SD-C) completion and publication with AFSC principals.

(e) Reviews and recommends Director of Military Programs signature approval and release of Army SD-C for implementation.

(2) The Program Manager, MILCON Business Process (PM MBP):

(a) Provides oversight, programmatic objectives and priorities for COS Program support to MBP.

(b) Provides MBP issues, concerns, and/or support to Army Senior Leader Reviews that may/will have an impact on standards and criteria managed by COS.

(c) Facilitates the delivery of assessments, analyses, and/or studies performed by COS in

support of Army Senior Leader Reviews.

(d) Facilitates synchronization and coordination of information or data resulting from Army Campaign Plan (ACP) or Senior Stationing Review decision milestones that may/will impact on facilities standards and criteria managed by COS.

(e) Provides consultation on and oversight of MBP policies, processes, procedures, and/or requirements to COS in support of standards and criteria development and implementation.

(f) Reviews MBP waivers received from RITs ICW PC RMS for impact and validity to MBP program and recommend disposition to Director Military Programs.

(g) Provides RITs with status of waiver requests to AFSP documents (Army Standards, Army Standard Designs, and/or Standard Criteria.

(h) Serves as a member of the COSMB.

(3) Engineering & Construction, Military Programs Directorate:

(a) Chief, E&C/Program Coordinator, Army Facilities Standardization Program (PC AFSP):

- Provides managerial oversight and direction on command policy, objectives, and priorities for the Program Coordinator, Army Facilities Standardization Program (PC AFSP) and the COS Program management team.
- Serves as principal military construction advisor to the COS management team and COSs.
- Provides technical and managerial oversight of individual training integration in support of MBP to the COS Program.
- Reviews and approves program execution guidelines, operating procedures, and monitors strategic communication on the COS Program throughout USACE.
- Periodically reviews and approves COS metrics for upwards reporting.
- Develops and maintains budget for implementing the COS Program.
- Manages funds receipt, allocation, and distribution to COS; and COS Program funds distribution supporting activities as directed by the PC AFSP.
- Serves as a standing member of the AFSC.
- Chairs the COSMB.

(b) Program Coordinator, Army Facilities Standardization Program (PC AFSP):

- Provides oversight and management of support to the AFSP.
- Develops and maintains program execution guidelines, operating procedures, and strategic communication on COS Program throughout USACE.
- Develops COS Program component of USACE policies, processes, and procedures in support of MBP.
- Identifies and establishes work assignments, workload priorities, and manages operations of the COS Program management Team.
- Provides broad programmatic objectives, priorities, and goals for the COS Program and COS business execution.
- Prepares HQUSACE notification of Army Standard Design publication for C/E&C review.
- Prepares Director of Military Programs Army Standard Design implementation authorization memo for C/E&C review.
- Reviews and provides PM MBP and PC RMS COS and National Team assessment of MBP waiver and recommend disposition for Director Military Programs consideration.
- Monitors and oversees the development, defense, allocation, and distribution of funds to execute the COS Program.
- Monitors and oversees the activities of COS Managers.
- Identifies and manages the development of individual, programmatic, and team training.
- Develops and implements COS metrics for upwards reporting.
- Advocates for resolution of programmatic issues, concerns, conflicts, or barriers that cannot be resolved by COSs with the AFSC.
- Synchronizes the activities of COSs with OACSIM and IMCOM.
- Identifies potential impacts of emerging OACSIM and/or IMCOM policies, processes, and/or procedures on the COS Program and COS mission execution.
- Adjudicates programmatic conflicts or provides programmatic clarification to mitigate conflicts within the COS Program.
- Reviews and coordinates Technical policies and criteria impacts to AFSP ICW the respective HQUSACE COP proponents.

- Serves as a member of the FDG.
- Serves as a member of the COSMB.

(4) The Combat Readiness Support Team (CRST):

(a) Identifies and prioritizes materiel end-items for review and assessment of potential impact on facility and/or infrastructure standards and criteria ICW the Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)), Program Executive Officers (PEOs), and materiel Program/Project/Product Managers (PMs).

(b) Identifies facility or infrastructure support requirements to successfully field end-items ICW with PMs, Life Cycle Management Centers (LCMC), Training and Doctrine Command System Managers/Training Developers (TSM)/TRADEV) and materiel developers (MATDEV).

(c) Assists PMs in the validation of facility and/or infrastructure requirements to support fielding.

(d) Assists COS in:

- Developing Courses of Action (COA) to mitigate potential impacts through either system development influence or elimination of facility/ infrastructure support requirement.
- Developing infrastructure or facility solutions to meet fielding life-cycle support.

(e) Coordinates COS support to PMs in:

- Identifying potential impacts to current Army Standards, Army Standard Designs, or engineering criteria in support of end-item PEOs and/or PMs.
- Assisting PMs in determining potential MILCON impacts and cost associated with end-item fielding.
- Assisting ARSTAF principal in developing/presenting facility or infrastructure COAs in support of senior leader development and milestone decisions.

(f) Serves as USACE central POC and facilitates/coordinates support to materiel PEOs/PMs/LCMCs.

(g) Serves as "Military-to-English" translator as well as functional and operational requirements reviewer/advisor to the COS.

(5) Communities of Practice (CoP):

(a) Advises COS when changes to industry or Government standards, criteria, policies,

metrics, or certifications within their sphere of responsibility may impact on standards and criteria published or under development.

(b) Provides technical engineering analyses, assessment, and solutions to issues identified by COS in support of the AFSP.

(6) Regional Integration Teams (RIT):

(a) Forwards waiver requests for AFSP documents directly to PC AFSP for processing and adjudication immediate upon receipt.

(b) Ensures MBP objectives are met (e.g., cost, delivery, time) in assigned projects.

(c) Advises geographic District on waiver documentation required based on past review cases.

(d) Ensures COS is included (e.g., project review, charrette involvement) in project directives and releases.

(7) MSC/Regional Business Centers

- Regional Acquisition Strategy.
- Regional workload, resources and technical competencies.
- Forwards waiver requests for AFSP documents directly to PC AFSP for processing and adjudication immediate upon receipt.
- Facilitate regional MBP issues between COS and Geographic Districts.
- Engage Geographic Districts in MBP.
- Participate in COS Management Board proceedings as a non-voting member.

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APPENDIX G

STANDARD OPERATING PROCEDURE USACE-COS-07

Post Occupancy Reviews

1. Purpose.

This Standard Operating Procedure defines the process and procedures for conducting a Post Occupancy Review (POR) on standard facility projects. The purpose of the POR process is to make an assessment of the lessons learned of completed Military Construction (MILCON) funded project as they relate to the overall performance of the Army standard design and processes utilized in their delivery. In addition to the POR process, lessons will also be gathered from other processes including but not limited to COS participation in design charrettes, Contractor Request for Information (RFI's), bidder inquiries, value engineering, Geographic District recommendations, Industry suggestions, etc.

2. References.

a. AR 420-1, Chapter 4 Army Military Construction and Non appropriated-Funded Construction Program Development and Execution

b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authorities.

This SOP establishes a baseline reference for PORs required by the Centers of Standardization (COS) and Geographic District (GD) services IAW reference 2.b. above and the COS Program Management Plan. Supporting authority is conveyed by directives and policy memorandums governing the Army Facilities Standardization Program (AFSP) in support of Army Transformation dated 24 May 2006.

4. Roles and Responsibilities.

In order for the lessons learned and recommendations for change derived from a POR to be of value and yield the continued improvement to the standard design, there should be participation by the complete PDT. Execution of a POR should include representation from the COS, the GD project manager, the Resident Engineers Office, the facility type functional proponent, the Office of the Chief of Staff of Installation Management (OACSIM), the building occupant, and the installation Department of Public Works.

5. Execution.

A complete POR will consist of a two-phased approach to evaluate the overall effectiveness of the standard design and the individual building performance of a specific project. These two phases will be conducted at representative sample of completed project locations for a particular standard:

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a. Phase I - This review will be conducted within one year after the building occupation. Review for compliance with facility standard. Evaluation of the design development, acquisition, construction and initial occupant input with regard to space allocation and adjacency, and overall building site integration will be reviewed at this phase. An initial evaluation of the building systems and finishes with regard to maintenance, durability, seasonal performances, energy utilization, acoustics, etc. will be reviewed at this phase.

b. Phase II - This review will be conducted 3-5 years after the building occupancy. Reviewing overall program mission changes and facility adaptations are reviewed at this stage. A more comprehensive evaluation of the building systems and finishes with regard to maintenance, durability, seasonal performances, energy utilization, acoustics, etc. will also be reviewed at this phase.

6. Trip Report/Evaluation/Incorporation.

The lessons learned will be formulated into a trip report with recommendations and presented to the appropriate Facility Design Team (FDT) members for evaluation. Approved changes will be formally incorporated into the Army Standard Design and all associated execution documents (i.e. the model Request for Proposal scope of work for that facility type, 1391 templates, etc.) as necessary to enhance the performance of future facilities and the delivery process utilized for their execution.

7. Process/Procedure.

This is a COS led process to make an assessment of completed projects only as they relate to the Army standard design and the process utilized in their delivery as applicable.

APPENDIX H

STANDARD OPERATING PROCEDURE USACE-COS-08

Standard Design Management

1. Purpose.

This Standard Operating Procedure defines the Standard Design process for each facility type that the COSs will be responsible for producing.

2. References.

a. AR 415-15, Army Military Construction and Nonappropriated-Funded Construction Program Development and Execution

b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authorities.

This SOP is established as a baseline reference for the Standard Design process in accordance with reference 2.b. above and the COS Program Management Plan.

4. Roles and Responsibilities.

a. General. Each COS will be responsible for producing standard design/criteria for each assigned facility type. Designs will be based upon the facility functional and operational requirements and constraints provided by the facility proponent. The level of compliance and frequency of change for various facility types differs based on mission need, procedures, and technology integration. Some are more stable while others require more scrutiny in their application as determined by the nature of the functions supported or the criticality of need and assurances desired by the Functional Proponent. While the standards and criteria applicable to each facility type will generally be reviewed for adequacy on a periodic basis, some are expected to change more frequently with the maturation of technology or the threat adjustments to mission requirements that may occur by external or global pressures. The FYDP will be used to characterize the annual workload projection.

b. In keeping with their mission, the OACSIM is the Specified Proponent referred to herein and the ACSIM is the principal ARSTAF proponent for Installation Management with IMCOM, CFSC, and AEC as executing agencies. USACE, AMC, and MEDCOM are in support as defined by the Army Campaign Plan.

5. Processes and Procedures.

a. Developing the Standard Design. The COS will initiate communication with appropriate representatives of OACSIM, IMCOM, and USACE, including the district that

previously managed the facility type if transition is necessary, to gather the facility requirements, existing standardized design(s) / criteria, and other relevant information upon which to base the standard design. Standard designs / criteria will be developed by the COS, which can include criteria level to mandatory features. The COS may use design resources at their discretion, including in-house staff, AE firms, designers within a design/build team, etc. BIM will be used for all design products. All D/B RFPs will require the use of BIM by the D/B contractor. Simultaneously, the COS puts in place Adapt Build mechanisms (IDIQ, where the Army's program warrants) to execute the design/adaptation and construction of their assigned facility types. These may be existing contracts or new single-award IDIQ contracts or any other contracting tool deemed adequate to meet execution requirements by the executing COS.

b. Implementing the Requirements. Upon receipt of the first project tasking, the Geographic District will make contact with the COS(s); appropriate team members from these organizations will jointly visit the installation to collaboratively complete a planning or design charrette. The charrette is intended to be an information sharing tool that documents the site development work the Geographic District is required to perform in preparation for the standard design facility integration into the site, the, utilities coordination, the combined site and facility LEED strategy, etc. The COS uses this information to supplement the facility standard D/B RFP or adapt build and acquires a contract. The contract shall require use of BIM software and As-Built information. All design information, including the BIM model and as-built conditions, shall be specified in the contract as being the property of the US Army.

c. Design Phase. The COS maintains a lead role during the design activities. Regardless of the contractual arrangement, the COS will be the technical lead for coordination, review, and acceptance of design deliverables. The Geographic District, the installation, and any other stakeholders will provide input to the COS regarding the design.

d. Definition of 80% Design, End product for COS: Develop Army standards and criteria, maintained through BIM technology, reflecting the adaptability to meet regional adjustments for architectural and engineering features for each region. COS, with GD support, will ensure completed designs are based on regionalized Army standards and criteria that will meet market conditions, installation local conditions and appearance criteria. (During interim of Phases 1-3, the COS should submit a proposal/recommendation to maintain/sharpen BIM skills.)

e. Construction Phase. The Geographic District's appropriate construction manager will be delegated ACO authority for the construction phase of the contract. Design and Construction are expected to occur on a fast-paced, overlapping schedule, so coordination between the COS and Geographic Districts is crucial to project success. During construction, the COS will support the Geographic District with all matters related to design; likewise, the Geographic District will follow the technical lead of the COS on all design issues. The district that awards the construction contract has the responsibility to input the project data in to the HAG database ICW the COS.

APPENDIX I

STANDARD OPERATING PROCEDURE USACE-COS-09

Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Reviews Related to Projects Executed with Centers of Standardization

1. Purpose.

This Standard Operating Procedure (SOP) will serve to identify roles of the Project Delivery Team (PDT) with respect to executing biddability, constructability, operability, environmental, and sustainability (BCOES) reviews within their area of responsibility in accordance with the Center of Standardization (COS) process.

2. References.

- a. AR 415-15, Army Military Construction and Nonappropriated-Funded Construction Program Development and Execution
- b. ER 1110-3-113, Department of the Army Facilities Standardization Program
- c. Memorandum from CECW-CE, 6 March 2006, Subject: Realignment/Establishment of Centers of Standardization, FY06
- d. ER 415-1-11, Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Reviews
- e. ER 1110-1-12, Quality Management
- f. ER 1110-1-8158, Corps-Wide Centers of Expertise Program

3. Authority.

This SOP defines BCOES review roles and responsibilities of the PDT in accordance with references above and the COS Program Management Plan. Supporting authority is provided by directives and policy memorandums governing the Army Facilities Standardization Program (AFSP) in support of Army Transformation dated 24 May 2006 and by the OACSIM memo dated 25 Jun 05 specifying the waiver process for the Army Facility Standard Program.

4. Certification.

The form or format of the BCOES certification provided to the Procuring Contracting Officer will comply with the current approved form or format of the BCOES certification at the Corps District making the award. This BCOES certification will include a written statement from the Chief of Engineering (or Chief of Engineering and Construction) at the COS certifying that the design package is in compliance with the Army Standards and with the USACE Standard Design and criteria. The COS BCOES certification is to make sure that all appropriate COS and any GD BCOES comments have been incorporated in the documents or satisfactorily resolved with

feedback on all comments provided to the reviewers. Appropriate signature blocks will be added that reflect a review by the responsible parties as noted below to guarantee that a thorough BCOES review is performed.

5. Roles and Responsibilities.

a. Chief of Project Management at the GD, through their project managers, will ensure adequate time to accomplish overall BCOES review activities is included in the project budget and schedules. Adequate time is 30 days, unless all reviewers agree to another schedule. The schedule and any revisions will be provided to all reviewers. Further, they will ensure adequate resources are available and funded by obtaining resource estimates from all required organizations, establishing and recording approved budgets, transacting funding commitments, and performing cost and control management to accomplish BCOES timely and thorough reviews.

b. Chief of Engineering and the Chief of Construction or the Chief of E&C at the GD will ensure that BCOES reviews are performed on all site-work pre-award packages consistent with current policy and will certify in writing that all appropriate BCOES comments have been incorporated in the documents or satisfactorily resolved and that feedback on all comments has been provided to reviewers. The review must include the COS product line facility system interfaces with site-work, and all installation specific coordination issues.

c. Chief of Engineering (or Chief of E&C) at the COS and the Chief of Construction or the Chief of E&C at the GD will ensure that BCOES reviews are performed on all COS product line facility pre-award packages. The Chief of Engineering (or Chief of E&C) at the COS will incorporate or assure resolution of resulting comments is accomplished and will certify in writing that all appropriate BCOES comments have been incorporated in the documents or satisfactorily resolved and that feedback on all comments has been provided to reviewers. The Chief of Engineering (or E&C) at the COS will also certify in writing that the pre-award package complies with the Army Standards and with the USACE Standard Design and criteria. The Chief of Engineering (or E&C) at the COS must solicit input from the GD respecting site or locality specific constraints that could restrict or impact the product line design solutions or criteria. The review must consider site-work system interfaces with the product line facility.

d. Chief of Contracting at the COS or the GD, whichever is awarding the contract, will ensure that bids are not opened, or proposals are not accepted, prior to the above certification unless the Procuring Contracting Officer (PCO) determines that it is in the best interest of the government to do so. If so, then a written determination and findings will be signed by the PCO prior to award and placed in the official contract file.

e. Division and District Commanders of the GD shall maintain responsibility to prepare implementation plans, organizational structure, and staffing to ensure effective and timely BCOES review consistent with delegated authority.

APPENDIX J

STANDARD OPERATING PROCEDURE USACE-COS-10

LEED Strategy and Coordination Activities for Center Of Standardization (COS) Continuous Build Process (Multiple Contractor) Projects

1. Purpose.

This Standard Operating Procedure will serve to identify a standardized approach and process for coordinating LEED scores and documentation for design and construction of multiple-contractor projects.

2. References.

a. AR 420-01, Army Facilities Management

b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

3. Authority.

This SOP is established to define the LEED (or applicable sustainability rating system) strategy and coordination activities of the geographic district and COS for design and construction of multiple-contractor projects, IAW reference 2.b. above and the COS Management Plan.

4. Introduction.

Center of Standardization (COS) Continuous Build Process projects are often characterized by having site work and building(s) for a project accomplished by separate contractors. Because the project LEED score includes the work of both building and site contractors, these projects present unique coordination challenges. The objective of this document is to provide a standardized approach for internal coordination that ensures the requirement is met without over-spending, minimizes documentation costs and provides a consistent format for contract language and LEED documentation. The following is the recommended strategy and coordination process and sample RFP text for both a COS building contract and a geographic district (GD) site contract when a building and its site work are accomplished by separate contractors.

5. Requirements and Responsibility.

The minimum LEED requirements are unchanged. The GD is responsible for the project achieving its minimum goal and for all associated documentation and reporting, including reporting requirements in the event that a project fails to meet its minimum requirement. The COS must provide necessary support to the GD to meet this obligation.

6. Pre-Design Coordination Activities.

a. Define the LEED Combined Project. The objective in defining the project for LEED purposes is to simplify the LEED documentation effort to the greatest extent possible. The Application Guide for Multiple Building and On-Campus Projects, by the U.S. Green Building Council (USGBC), provides instructions on how to define individual credit compliance and prepare one set of project documentation for projects containing multiple buildings. This document will be used for all combined projects with multiple buildings regardless of the number of contracts. It also applies to individual contracts for multiple buildings (example one COS task order for multiple standard design buildings).

(1) In general, a strategy of defining the LEED Combined Project in terms of the site contractor's scope represents the simplest option and should be used because it eliminates the need for the site contractor to maintain separate tracking and documentation relating to portions of his work.

(2) The GD identifies all building and site work contracts included in the LEED Combined Project and provides this information to all parties preparing contracts/task orders for the Combined Project.

b. Develop Single Score LEED Strategy Table for Each Standard Design. For each Combined Project, COS and GD collaborate to complete the LEED Strategy Table for each standard design, indicating a minimum of 33 points, which are selected by GD and COS based on feasibility and cost. A total score of 34 or 35 is recommended to keep the project compliant in the event of inadvertent loss of a point during project execution. To comply with the intent of giving the Contractor maximum latitude, the table has columns indicating whether substitution of another point for the one indicated is permitted. In general, substitution is permitted for all points except combined points, where one contractor's failure to perform loses the point for the combined project.

(1) There are five basic types of LEED points:

(a) Points based on site selection. These are determined by site selection and are identified by the GD. Substitutions of these points are generally N/A.

(b) Site points. These are earned by site design and are identified by the GD. Substitution of other site points is permitted.

(c) Building points. These are earned by building design and are identified by the COS. Substitution of other building points is permitted.

(d) Combined building/site points. These require both building and site design elements and both portions must be accomplished to earn the point. If a combined building/site point is selected in the LEED Strategy Table, substitution is not permitted by either GD or COS and the point is, in effect, mandatory for both contractors.

(e) Combined aggregate materials points. These require a percentage achievement based

on combined project total (building(s) and site) materials cost. Each contractor must contribute to earn the point. The LEED overall percentage requirement must also be divided up between the site and building contractors to reflect a reasonable contribution from each for the individual points, based on scopes of work. For example, site work typically has a greater contribution to the Regional Sources point than the building contribution. Conversely, the building typically has a greater contribution to the Recycled Content point than the site work contribution. If the point is selected in the LEED Strategy Table, substitution is not permitted by either GD or COS and the point is, in effect, mandatory for both contractors. Additionally, the LEED Strategy Table must indicate, in the Remarks column, each contractor's required percentage contribution.

(2) The procedure for developing the LEED Strategy is as follows:

(a) COS creates and maintains a master LEED Strategy Table for each standard design with all building points represented in the standard design filled in as well as proposed combined building/site points and combined aggregate points that are usually feasible. See attached sample, which will be used for format of all LEED Strategy Tables.

(b) As part of initial project coordination, COS forwards the master table for the standard design to the GD for coordination and input.

(c) GD fills in the table for site selection points, site points and combined building/site points that GD commits to.

(d) GD fills in the table for combined aggregate materials points that GD commits to and indicates the appropriate division of responsibilities between contractors, based on combined project scope.

(e) GD reviews planning/parametric estimate charrette report and coordinates with COS to ensure strategy table reflects specific features programmed for the project and the division of responsibilities for these features (example PV panels). This will be reflected in construction funding distribution.

(f) If, due to adverse site conditions, the GD must propose added building points to bring the project up to the minimum score, the GD will bring this to the COS attention and the COS will confirm the added building point commitment. This will be reflected in construction funding distribution.

(3) The completed LEED Strategy Table does the following:

(a) Defines the number of points the GD and COS each commit to and the number of points their respective contractors must earn.

(b) Defines the division of responsibilities between GD and COS contractors for combined and aggregate materials points.

(c) Defines both contractors' latitude for substitutions of other points for those indicated in the table.

(d) Contains all of the information in one document that is included by appendix to the applicable COS and GD solicitations. All of the completed LEED Strategy Tables in the Combined Project are included in the GD solicitation for site work.

NOTE: For projects with one GD site contract and multiple COS contracts, GD must ensure that the site commitment indicated for each standard design LEED Strategy Table in the combined project is coordinated with respect to site work as a whole (see Application Guide for Multiple Building and On-Campus Projects). For example, the storm water quantity point will be documented for the entire site, so the strategy tables should all match with respect to this point.

7. Generating Project Documentation.

a. To simplify determining individual contractor compliance, each contractor is responsible only for generating LEED documentation for his portion of the work. No contractor is required to modify or include any LEED data from other contractors.

b. To ensure compatible formats, all contractors are required to use LEED Letter Templates, which are available only to USGBC LEED Registered projects.

c. Individual contractors use downloaded sets of LEED letter templates to which they add contractor name, project name/number and individual building identification as applicable. Each contractor furnishes electronic copies of templates and supporting attachments at completion and acceptance of final design, periodically as determined by the Government during construction, and at closeout.

d. The GD compiles and summarizes the documentation from all contractors for the project record. The COS compiles the documentation of the standard design for future use.

8. USGBC Registered Projects.

a. USGBC Registrations: In order to obtain legal use of the LEED letter templates for conformity of documentation format among all contractors in a combined project and for multiple iterations of standard designs, the following USGBC registrations will be funded using project funds (design or construction funds):

(1) Combined Project. Each Combined Project (site work and non-standard buildings) is registered with USGBC and this registration is used to download LEED letter templates for the GD site and non-standard building contract(s). This registration is also where the GD creates summaries of the aggregate materials data from all contractors and compiles the LEED documentation from all contractors in the Combined Project.

(2) Registered Standard Design Template Library. Each standard design is registered with USGBC and this registration is used to download LEED letter templates for the COS standard design building-only contract(s). This registration is also where the COS compiles both general documentation for all applications of the standard design and individual project-specific documentation. The COS makes this data available for subsequent applications of the standard design to minimize duplication of documentation.

b. When to Register: Projects should be registered before design commences so that the templates are available to the design team from the start of design. If the GD documents site selection points during RFP preparation, the project should be registered during RFP preparation.

c. Administration of USGBC Registered Projects: For every registered project, a Project Administrator must be identified. The Project Administrator controls access to the LEED Letter Templates and controls save/modify data rights in the online templates. Only one Project Administrator is allowed per registered project, but Project Administrator designation may be transferred from one person to another.

(1) Combined Project. Regardless of who registers the project, during construction the GD or their designee (such as a consultant or Land Development Engineer) must administer the registered project and compile approved design and construction phase LEED documentation from all contractors. This individual will prepare summaries of all contractor aggregate materials data provided periodically during construction (at a frequency determined by the construction admin team) and will compile closeout submittals from all contractors. Each GD will determine internally who to designate as the Project Administrator for design phase and for construction phase.

(2) Registered Standard Design Template Library. Regardless of who registers the standard design, the COS must administer the registered standard design using in-house personnel. This individual will provide downloaded letter templates with instructions to COS building-only contractor(s) and will compile design phase and selected construction phase data from all COS contractors. Each COS will determine internally who to designate as the Project Administrator for design phase and for construction phase.

9. Reviewing Project Documentation.

a. Design Phase. The entity responsible for design technical conformance review includes LEED design phase documentation in technical review. At completion and acceptance of final design submittals the contractor furnishes electronic copies of LEED documentation, which will be provided to both the GD and COS design phase registered project website administrators.

b. Construction Phase. The GD monitors the work through construction to closeout, which includes periodic monitoring of LEED documentation, summarizing aggregate materials data from all contractors and review and acceptance of closeout documentation of all contractors. The GD also furnishes standard design contractor construction phase data to the COS as requested.

Examples:

- Sample MILCON Business Process (MT) RFP template text.
- Sample MBP RFP Appendix LEED Requirements for Multiple Contractor Projects.

SAMPLE MBP RFP TEXT STATEMENT OF WORK PARA 6.14.2

“Credit Validation. The project is the site work portion of a Multiple Contractor Combined Project. USGBC registration and use of the LEED Letter Templates is required. Registration and payment of registration fees will be by the [Contractor][Government]. Administration of the online project will be [by the Government][shared between Contractor and Government per Appendix LEED Requirements for Multiple Contractor Combined Projects][by the Contractor per Appendix LEED Requirements for Multiple Contractor Combined Projects]. Validation of credits will be accomplished by the Government. USGBC certification of the project by the Contractor is not required. The Government may choose to seek USGBC certification of the project, in which case the Government will pay certification fees and coordinate with USGBC and the Contractor will furnish audit data as requested at no additional cost.”

SAMPLE MBP RFP TEXT STATEMENT OF WORK PARA 6.14.6

“Multiple Contractor Combined Project. When site work and building(s) are accomplished by separate contractors, it is a Multiple Contractor Combined Project for purposes of LEED scoring and documentation. This project is part of a Multiple Contractor Combined Project that includes site work and building(s) accomplished by separate contractors. See Appendix LEED Requirements for Multiple Contractor Combined Projects and Appendix LEED Strategy Table(s) for special requirements for this project.”

Sample MBP RFP Appendix LEED Requirements for
Multiple Contractor Combined Projects

LEED Requirements for Multiple Contractor Combined Projects (26 Nov 08)

When site work and building(s) for a project are accomplished by separate contractors, it is referred to as a Combined Project for purposes of LEED scoring and documentation and the following is required:

- LEED points relating to site work must be combined with the LEED points for each building to arrive at a single LEED Combined Project score.
- LEED points having both building requirements and site requirements (combined bldg/site points) must be coordinated between the contractors.
- LEED aggregate materials points must be coordinated between the contractors and a division of responsibilities for each contractor's required contribution to the point must be developed.
- LEED Project documentation from separate contractors must be combined.

Multiple Contractor Combined Project Definition. See paragraph MULTIPLE CONTRACTOR COMBINED PROJECT in paragraph PROJECT SPECIFIC REQUIREMENTS of the Statement of Work to see if this project is part of a Multiple Contractor Combined Project. A summary of the separate projects that constitute the Combined Project may be provided at paragraph SUSTAINABLE DESIGN – ADDITIONAL INFORMATION or may be obtained from the Contracting Officer's Representative. Typical Multiple Contractor Combined Projects are comprised of the site work contract and all the building-only contracts for buildings that the site work is provided for in the separate site work contract.

LEED Points Coordination. See Appendix LEED Strategy Table(s) for the total number of points each contractor is responsible for obtaining, for special requirements relating to combined building/site points and for each contractor's requirement relating to aggregate materials points each portion of this Multiple Contractor Combined Project. Each contractor providing a building is referred to as Building CTR and Site CTR refers to the contractor providing the site development. For each building included in the site work contract, the site work contractor is both Building CTR and Site CTR for that building. Aggregate materials percentages indicated in the table(s) are percentage of that contractor's materials total.

Point Substitutions. During preparation of the Proposal, each contractor is free to substitute other LEED points for those indicated in the LEED Strategy Table(s), except points marked "NO" in the "Building CTR Substitutions Permitted" column may not be deleted or added by substitution by building contractor and points marked "NO" in the "Site CTR Substitutions Permitted" column may not be deleted or added by substitution by site contractor. Credit substitutions after award are not permitted except with the advance approval of the Contracting Officer.

LEED Documentation. Each contractor is responsible for developing all project LEED documentation demonstrating compliance for their portion of the work and must utilize the LEED Letter Templates. Each contractor is responsible for updating construction phase LEED documentation at least monthly until construction closeout. No CTR will duplicate the data of another CTR within their own documentation. Each contractor will include the contractor name, project name and number and individual building description as applicable on each Letter Template. The LEED Letter Templates are copyright protected and shall be used only for this specific contract and this registered project.

Compiling LEED Documentation from Multiple Contractors. At completion and acceptance of final design submittals the completed design phase letter templates and their attachments from all CTRs in the Multiple Contractor Combined Project will be compiled at the registered site project. All CTRs will furnish electronic copies of their completed letter templates and their attachments for this purpose. Monthly during construction and at construction closeout all CTRs current construction phase letter templates and their attachments will be compiled at the registered site project. Summary letter templates for all aggregate credits (see AGMBC for which credits are aggregate credits) will be created and maintained monthly with summary data from all from all CTRs in the Multiple Contractor Combined Project at the registered site project. All CTRs will furnish electronic copies of the current updated templates and their attachments for this purpose monthly and at closeout.

Site Work Portion of Multiple Contractor Combined Project, Administration by the Government. If paragraph 16.4.2 CREDIT VALIDATION indicates this is the site work portion of a Multiple Contractor Combined Project and that administration of the online project is by the Government, the Government will provide access to blank Letter Templates for site CTRs use and the Government will perform the compiling indicated in paragraph Compiling LEED Documentation from Multiple Contractors above.

Site Work Portion of Multiple Contractor Combined Project, Shared Administration. If paragraph 16.4.2 CREDIT VALIDATION indicates this is the site work portion of a Multiple Contractor Combined Project and that administration of the online project is shared between Contractor and Government, the Contractor will administer the registered site project until final design acceptance, at which point administration will be transferred to the Government. The Government will administer the project during construction and the Government will perform the compiling indicated in paragraph Compiling LEED Documentation from Multiple Contractors above.

Site Work Portion of Multiple Contractor Combined Project, Administration by the Contractor. If paragraph 16.4.2 CREDIT VALIDATION indicates this is the site work portion of a Multiple Contractor Combined Project and that administration of the online project is by the Contractor, the Contractor will administer the project and the Contractor will perform the compiling indicated in paragraph Compiling LEED Documentation from Multiple Contractors above.

Standard Design Building(s) portion of Multiple Contractor Combined Project, Administration by the Government. If paragraph 16.4.2 CREDIT VALIDATION indicates this is a standard design building(s) portion of a Multiple Contractor Combined Project and that administration of

the online project is by the Government, the Government will provide access to blank Letter Templates for standard design building CTRs use as follows:

Instructions for Obtaining LEED Letter Templates for Registered Army Standard Designs

General. Contractors providing Army standard design buildings only (site work by another contractor) in a Multiple Contractor Combined project obtain their LEED Letter Templates for the project from the Center of Standardization (COS) for that standard design.

Information You Need to Provide. After award, contact the COS POC indicated below requesting LEED Letter Templates for your project. In your request, indicate the following:

- a. Project name, location, Contractor name, PN number and contract number
- b. Description of building(s) you are responsible for (example: S/M/L/L COF w/detached admin)
- c. LEED Documentation Responsible Party name, phone number, email contact info
- d. Responsible party certification of understanding that Letter Templates furnished by the Government for this project are copyright protected and will not be used for any purposes other than for this project documentation.
- e. Attach the LEED Registered Project Checklist from conformed proposal which indicates the points the project will earn/contribute to.

SAMPLE EMAIL REQUEST:

To: (COS POC below)

CC: (Contracting Officer's Representative (COR) for your contract)

Subject: COS LEED Letter Templates Request

We have an awarded contract and request COS LEED Letter Templates for:

Project: 4th BCT Complex

Location: Fort Bragg, NC

Contractor: Great Design Builder Inc.

Project Number/Contract Number: PN 65555, W912HN-08-C-0001

Standard Design Building Type(s): Large Brigade HQ, Medium Battalion HQ

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Our Responsible Party for LEED Documentation for this project is (name, phone number, email).

Certification: I, (sender name), certify that the LEED Letter Templates furnished by the Government for this project are copyright protected and I will ensure that they are not used for any purpose other than project documentation for this project only.

Attached Checklist: Please see attached LEED Project Checklist, which indicates the points this project will earn.

Salutation,

Name

APPENDIX K

STANDARD OPERATING PROCEDURE USACE-COS-11

Construction Contract Changes Related to Projects Executed with the Centers of Standardization

1. Purpose.

The purpose of this Standard Operating Procedure (SOP) is to identify roles and procedure of the geographic district (GD) and the Center of Standardization (COS) in the administration of construction contract changes executed on projects within the area of responsibility of the COS.

2. References.

a. AR 415-15, Army Military Construction and Nonappropriated-Funded Construction Program Development and Execution

b. Memorandum from CECW-CE dated 6 Mar 06, Subject: Realignment/Establishment of Centers of Standardization (COS), FY06

c. Resident Management System (RMS) Users Manual and Training Guide, RMS Support Center, undated

d. Federal Acquisition Regulations and Supplements

e. USACE-COS-03, Standard Operating Procedures, Roles of the Geographic District Related to Projects Executed With Centers of Standardization

3. Authority.

This SOP is established to define the roles and general procedure of the GD in conjunction with the assigned COS, in accordance with reference 2.b. above. Supporting authority is conveyed by directives and policy memorandums governing the Army Facilities Standardization Program (AFSP) in support of Army Transformation dated 24 May 2006 and by the ACSIM memo dated 25 Jun 05 specifying the waiver process for the Army Facility Standard Program.

4. Process and Procedure.

Per USACE-COS-03, reference 2.e. above: "During construction, all changes to the facility will be coordinated with the COS before execution." This is the basic premise for this SOP. The objective is to provide the COS adequate and timely information to allow it to fulfill the primary role to "provide and maintain Army Standards on Army facility standard design for the task order award and construction of facility types under their responsibility." All proposed changes related to the facility standard design not initiated by the COS will be provided to the COS Technical POC with a copy to the COS Manager for review and verification. The COS Technical POC is the designated leader at the COS responsible for providing and maintaining the standards and facility standard designs for a given facility. The current COS Technical POC

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names can be found on the COS website. No change will be finalized without a documented verification from the COS Technical POC in the contract file that the change conforms to the Army Standard and Standard Design, except as allowed in paragraph (5) below. The following primary procedure will be utilized:

(1) All proposed changes related to the facility standard design not initiated by the COS will be recorded at their inception in RMS as a Basic Change Document (BCD) and identified with a numbered change request.

(2) The proposed change request / BCD will be provided to the COS Technical POC and the geographic district PM upon completion by electronic mail (or other appropriate real-time notification) with receipt verification.

(3) Upon receipt of the message and BCD, the COS Technical POC will review and determine potential impacts to the Army Standard and Standard Design of the facility.

(4) As soon as possible, but within 5 working days the COS Technical POC will provide verification that the change request meets the standard. If the change request does not meet the standard, the COS Technical POC will provide a detailed explanation by email to the originating construction representative. The Administrative Contracting Officer (ACO) will attach the COS response to the change request file. If a COS Technical POC verification is not received within 5 working days, the ACO will notify the geographic district PM, who will determine the reason for delay. After notifying the geographic district PM, the ACO may proceed with processing the change request, but will not finalize the changes without documented verification from the COS Technical POC.

(5) The ACO will not execute a change that conflicts with the facility standard design without prior approval of the COS Technical POC unless delaying the change would result in an immediate work stoppage, a potential for an anti-deficiency violation, or would result in a safety issue that would endanger the workers or others at the construction site. In these cases the ACO will immediately notify the COS Technical POC of the necessity to execute the change.

5. Limitations and Responsibilities.

a. Notwithstanding any direction to the contrary, there shall be no limitation on the warranted authority of the ACO, except that which may be directed by the authorizing official issuing the ACO warrant or the Contracting Officer assigning the ACO to the contract.

b. The Office Engineer for the ACO should provide the BCD to the COS Technical POC and the PM and other appropriate PDT members upon BCD inception.

c. The COS TECHNICAL POC should provide the ACO an approval notice within 5 full working days. The ACO should then attach this notice as supporting documentation to the RMS change request.

- d. The ACO may process the change request to completion after the BCD is completed.