



**US Army Corps
of Engineers**

Total Building Commissioning

COMMISSIONING ORGANIZATION CHART AND ROLES AND RESPONSIBILITIES

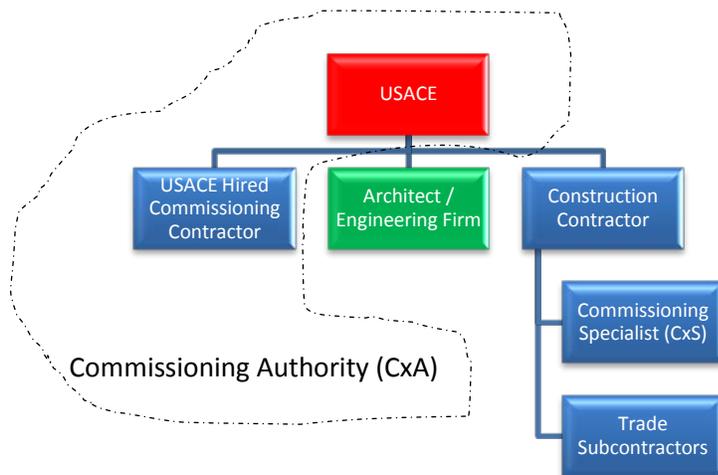


FIGURE 1: Design – Bid – Build (D-B-B) Commissioning Organization Chart

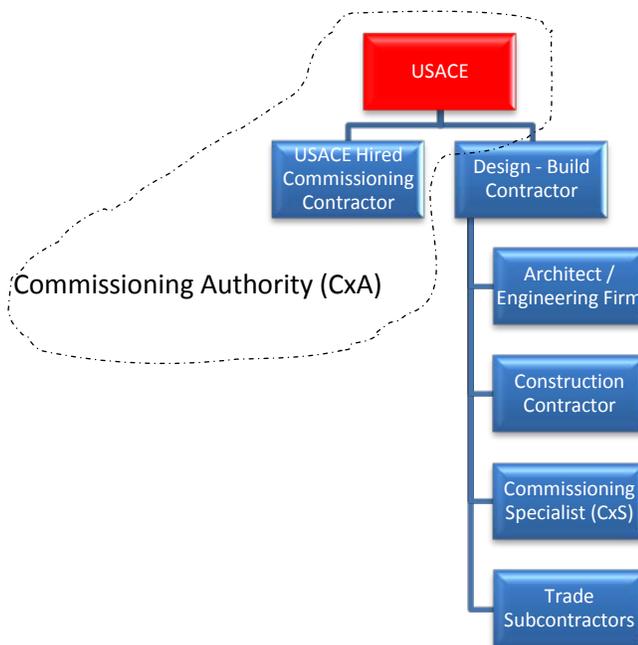


FIGURE 2: Design –Build (D-B) Commissioning Organization Chart

TABLE 1: ROLES AND RESPONSIBILITIES

PRE-DESIGN PHASE	<u>CxA</u>	<u>CxS</u>
Assists PDT develop the Owners Project Requirements (OPR)	X	
Ensure that design team has OPR	X	
Develop Cx plan (DESIGN PHASE include draft CONSTRUCTION PHASE)	X	
DESIGN PHASE	<u>CxA</u>	<u>CxS</u>
Review concept level design submission against OPR	X	
Start developing Cx specification	X	
Ensure that design concept is in compliance with OPR	X	
Develop format for the systems manual	X	
Review midpoint design submission against OPR	X	
Update and incorporate comments into Cx specification	X	
Ensure that midpoint design submission is in compliance with OPR	X	
Review completed design documents prior to release for construction against OPR	X	
Finalize Cx specification	X	
Ensure the completed design documents are in compliance with the OPR prior to release for construction	X	
Review Basis of Design (BOD) and concur that it is compliance with the requirements in the OPR	X	
Develops format for Construction Phase Cx issues log	X	
Develop draft Pre-Functional Checks (PFC)	X	
Develop draft Functional Performance Tests (FPT) [NOTE: That coordination with A/E is necessary]	X	
Compile Design Phase Cx report	X	
CONSTRUCTION PHASE	<u>CxA</u>	<u>CxS</u>
Review construction submittals and shop drawings against contract documents	X	X
Develops commissioning schedule		X
Reviews and recommends approval of Cx schedule	X	
Finalize commissioning plan in accordance with Cx spec	X	
Perform routine inspections	X	X
Chairs Cx construction progress meetings		X
Coordinates between General Contractor and trade subcontractors		X
Maintains Cx issue log	X	
Finalizes PFC using draft PFC as template	X	
Executes PFC as required (CxA must witness !!)	X	X (100% required per spec)
Approves completed PFC	X	
Develops FPT using draft FPT as starting point	X	
Executes FPT as required (CxA must witness!!)	X	X

Approves completed FPT	X	
Maintains and assembles all required subcontractor testing and startup Cx documentation during construction		X
Compile Construction Phase Cx report	X	
Develop systems manual	X	X
Submits all documentation required per LEED* [DEPENDS ON SPECIFICATION REQUIREMENTS]		X
OCCUPANCY AND OPERATIONS PHASE	<u>CxA</u>	<u>CxS</u>
Verify any seasonal testing of the facility	X	
Verify training effectiveness of O&M staff within 10 months after substantial completion	X	
Conduct a lessons learned workshop	X	