



1.1 Overview

Construction project management includes managing the engineering resources required to deliver the project, communicating with the traveling public, property and business owners, identifying and managing risks and administering the construction contract. The Project Manager remains in responsible charge of the project throughout the construction phase. The Construction and Materials Manual (CMM) provides detailed information for managing the construction contract and communicating with project stakeholders.

The scope of work for a construction project is determined by the construction contract. Contracts vary greatly in size and complexity. Consequently, the engineering resources required to deliver the construction project will also vary. The construction delivery budget is typically based on the number of staff needed to administer the contract at any time. Staffing needs should consider concurrent activities, geographic separation, specialty work, nearby contracts, materials testing, and anticipated hours of work.

Initial preparation should include reviewing the bid results to identify items that, if the quantity increases, may significantly impact the cost of the project. The team should also be aware of any commitments agreed to during the design phase and potential impacts from utility or railroad contracts. The construction oversight team is responsible for collecting data and creating project records. The team must be familiar with the bid items in the contract and the associated requirements.

As with all projects and during all phases, communication is a key project management activity. During a construction project, communication includes updating stakeholders on project progress, entering data in systems like the Lane Closure System, and keeping the regions communications manager informed of significant issues. The team should be especially aware of staging changes, traffic congestion and emergency vehicle access needs.

During the previous Project Initiation Phase, the Project Management Plan (Design) was initially created by the SPO Scope Engineer and then updated by the PDS Project Manager. During the subsequent Design Phase, the processes of executing, controlling, managing, monitoring, performing quality assurance/control, and using the change management process were accomplished. During this Construction Phase, the Project Management Plan (Construction) for non-mega projects needs to be created and then executed, monitored and controlled, and closed. For Mega projects, the PMP (Construction) must be developed earlier in the process. FHWA mega project requirements require a draft PMP, including both design and construction components, be completed prior to NEPA being completed (recommended 60 days prior), with the final PMP submitted within 90 days following NEPA approval. Construction components can be explained in a broad fashion in this PMP, with additional detail provided later in the process. However, this additional detail must be provided prior to the authorization of construction for the project. During these processes any changes are addressed through a change management process.

The detailed Project Management activities during this phase will be discussed in a future update. They are subdivided into nine knowledge areas, each focusing on an aspect of project management. Each of the activities are accomplished by considering what information is needed as inputs, what tools/techniques are available to act on the inputs, and what the resulting outputs are.