

U.S. DOT Federal Transit Administration TPM-20 Office of Capital Project Management Project Management Oversight

#### **Oversight Procedure 53 - Readiness to Procure Construction Work**

#### **1.0 PURPOSE**

The purpose of this Oversight Procedure (OP) is to describe the review, analysis, recommended procedures, and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) with respect to the project sponsor's readiness to procure a project's major construction and equipment contracts.

While this OP focuses on Capital Investment Grant (CIG) projects, which have specific requirements by law, it also applies to all capital projects. FTA will issue Implementation Plans (IPs) to clarify the specific reviews and expected deliverables based on the project types.

#### 2.0 BACKGROUND

Issuance of design documents for bid or requests for proposal (RFPs) marks an important milestone in project implementation. This is a final step before the project sponsor enters into construction contracts that are binding on the project sponsor as well as the construction contractor. The PMOC should conduct their review after the project sponsor's contract package is sufficiently developed to permit an accurate assessment; typically around the 90 percent design level for traditional Design-Bid-Build (DBB) contracts. If the project sponsor plans to use an alternate delivery method, such as Design-Build (DB) or construction manager/general contractor (CM/GC) (also known as construction manager-at-risk (CMR)), the timing of the review should be advanced accordingly.

#### **3.0 OBJECTIVES**

FTA's review of the project sponsor's readiness to procure construction work helps to ensure that:

- The project sponsor has developed the design documents to an appropriate level of completion given the selected delivery method;
- The procurement packages and supporting documents are complete, accurate, and consistent with the project scope, as established in the Project Development phase;
- The procurement package is consistent with appropriate Federal requirements, including Buy America requirements;
- The project sponsor's cost estimates accurately reflect contractual requirements;
- The project sponsor has addressed the project risks identified by implementing mitigation measures to the greatest extent possible;
- The project sponsor has established a plan for qualification, bid, and award that follows accepted best industry practices;
- The project sponsor has established procedures in place to deal with unexpected procurement issues (for example, no bids, single bid, unacceptably high bids, and protests); and
- The project sponsor's organization is prepared to successfully manage the contract package through procurement, construction, and start-up, or in the case of a DB or CM/GC contract, through the design construction and start-up phase.

#### 4.0 REFERENCES

The PMOC shall become familiar with the following references to Federal legislation, regulation, and guidance before reviewing the project sponsor's work. These are the principal references, but this list is not exhaustive:

#### 4.1 Regulations

• Federal Acquisition Regulation (FAR)

#### 4.2 FTA Circulars

• <u>C 4220.1F</u>, Third Party Contracting Guidance

#### 4.3 Guidance

- FTA's Best Practices Procurement Manual (2016)
- <u>Pricing Guide for FTA Project Sponsors</u> (2020)
- <u>Procurement System Self-Assessment Guide</u>
- FTA Project and Construction Management Guidelines (2016)

# 5.0 PROJECT SPONSOR'S SUBMITTALS

Before performing the review, typically three to six months prior to advertising major construction and equipment bid packages, the PMOC should obtain and study the following project documents. The PMOC should notify FTA of important discrepancies in the project information, including incomplete or unavailable information that would hinder the review. An example would be a mismatch between drawings and cost estimate in which the drawings are current and the cost estimate is two years old.

- Scope/Project Definition/Procurement
  - Final environmental documents and National Environmental Policy Act (NEPA) determination
  - Construction documents (plans and specifications including Division 1 Provisions)
  - Geotechnical Baseline Report
  - Value Engineering Reports
  - Constructability Reviews
  - o General and Supplementary Conditions of the Construction Contract
  - Request for Bid or Instructions to Proposers
  - Vehicle design documentation
- Project Management Plan (PMP) and subplans completed, including but not limited to:
  - o Signed Agreements with railroads, utilities, and other third parties
  - Risk Assessment, Risk and Contingency Management Plan
  - Safety and Security Management Plan (for application to construction)
  - o Project Delivery Plan, Contract Packaging Plan, Procurement Policies and Procedures
  - Project sponsor Management Capacity and Capability
  - Quality Assurance/Quality Control Plan and Records
  - If an OP 32D and/or OP 52 review has been completed, applicable findings and conclusions should be examined for consistency with elements of this review.
- Schedule

- Project schedule in original and Standard Cost Categories (SCC) format; schedule narrative describing critical path, expected durations, and logic
- Cost
  - Capital Cost Estimate in original and SCC format, including Basis of the Estimate
  - Full Funding Grant Agreement (FFGA) and attachments (if applicable)

# 6.0 SCOPE OF WORK

#### Project Management Oversight (PMO) Reviewers:

The quality and usefulness of the review relies mainly on the perception and judgment of the reviewers. Ideally, they should be senior technical managers qualified to perform the work being reviewed. Because transit projects are complex and interdisciplinary in nature, the reviewers should have a broad range of knowledge, experience, and capabilities. Structural plans should be reviewed by structural engineers; signaling plans should be reviewed by signaling engineers, etc.

# Tasks:

This review is divided into three sub-reviews described in the tables below. Review items may be modified somewhat to accommodate the particular circumstances associated with a project.

- 1. Confirmation of the readiness for procurement of a complete bid package, including plans, specifications, and contract provisions. Confirmation that Federal procurement requirements are addressed;
- 2. Confirmation that the procurement package is consistent with the scope, schedule, and budget established during the Project Development Phase; Confirmation of the readiness of the project sponsor's organization with respect to having necessary qualified project staff; consistent PMPs, procurement and construction management procedures, including project controls procedures; needed interagency, third party, and real estate agreements; and required financial resources. Additionally, ensure that the project sponsor has sufficiently addressed the project risks identified during the Risk Assessment and mitigated them to the extent possible.

Confirmation of the readiness for bidding of the construction procurement package is accomplished by the following specific reviews:

Review Item	Review Objective	Review Method
Construction Plans and Specifications	To confirm that the plans and specifications completely and clearly define the required work and that there are no major/significant omissions. To confirm that construction documents reflect results of constructability reviews. To confirm that any project sponsor-	Review by qualified engineer(s) with expertise in the area(s) of design.
	To confirm that any project sponsor- accepted Value Engineering	

Review Item	Review Objective	Review Method
	alternatives have been incorporated into the construction documents. To confirm consistency with any project sponsor plans for owner- furnished equipment.	
Construction Plans and Specifications for DB delivery or other alternate delivery method	To confirm that the construction plans, specifications, bridging documents, and/or performance requirements for design and construction are at the appropriate level of completion to adequately define the scope of work. A separate review of the project sponsor's DB procurement documents may be required to confirm that the process is sound and conforms to FTA Third Party Contracting Guidance Circular (C 4220.1F).	Review by qualified engineer(s) and construction manager(s)
Construction Contract Terms and Conditions	To confirm that the construction contract completely and clearly defines the terms and conditions under which the work will be performed. To confirm that Federal procurement requirements are addressed, including Buy America requirements.	Review by a person or contract administrator with experience in managing construction contracts of similar scope and complexity
Duty America requirements:Construction Contract DocumentTo ensure consistency between the bid package and the contract packaging plan.Conditions for DB delivery and other alternate delivery methodsFor DB contracts, to confirm that the contract clearly defines both design and construction requirements.For CM/GC contracts, to confirm that both design phase and construction phase services are adequately defined, and calculation of the contract should be conducted to confirm that the requirements		Review by a person or contract administrator with experience in managing a DB contract of similar scope and complexity.

Review Item	Review Objective	Review Method
Quality assurance records	To confirm that quality assurance checks and reviews have been performed in accordance with the approved Quality Assurance Program Plan (QAPP)	Review QA audits and observations by a person with experience in performing quality assurance reviews or audits.
Construction Cost Estimate	To confirm that the estimate as prepared is consistent with the plans, specifications, and Contract General and Special Conditions, and that it is based upon contemporary cost information. To confirm that the estimate of General Conditions' costs reflects actual contract requirements and not an industry average factor.	Review by a cost estimator with experience in cost estimating, including the estimation of the construction cost impacts of contract special provisions related to risk transfer and construction limitations. Consider interview of agency/consultant estimator to confirm that they have reviewed contract terms and conditions and made appropriate allowances.

Confirmation that the bid package is consistent with PMPs with respect to delivery method, scope, schedule, and budget. The following reviews and comparisons provide confirmation that the bid package is consistent with the Environmental Documents and previously accepted PMPs.

Review Item	Review Objective	Review Method
Plans, specifications, and special contract conditions with respect to Environmental Documents	To confirm compliance of the work to be constructed with the Environmental Documents	Comparison, using qualified personnel, of the design and construction requirements of the Environmental Document with the designs and requirements of the bid package
Plans, specifications, and special contract conditions with respect to the project scope of work.	To ensure that the documents reflect the scope of work developed during the Project Development and engineering phases.	Compare bid package scope of work with that developed during Project Development and engineering phases using qualified personnel.
Plans, specifications, and special contract conditions with respect to project master schedule	To ensure consistency between the bid package and the project master schedule. Review the schedule in context with the Cost Estimate(s); ensuring that cost associated with all work activities have been properly accounted for in the cost estimate and vice versa.	Compare bid package schedule information with project master schedule using qualified personnel. Identify management baseline data used and modifications made through the procurement phase. Particular attention should be paid to schedule contingency for delay and re-bid. Also ensure that predecessor activities will not interfere with construction per the bid package schedule (examples: preceding

Review Item	Review Objective	Review Method
		contractors, utilities relocations, real estate acquisition).
Construction Cost Estimate with respect to Project Budget	To confirm that the Construction Cost Estimate plus appropriate contingencies is affordable within the overall project budget. To confirm consistency of cost (and schedule) package level products and documentation with package management baselines. To confirm that the project schedule and Cost Estimate are in sync, i.e. time allocated for work activities in the cost estimate agrees with time allocation in the schedule.	Compare Construction Cost Estimate with project budget using qualified personnel. Identify management baseline data used and modifications made through the procurement phase.

Confirmation that the project sponsor's organization has the necessary precursors to begin construction, and that the organization is ready to enter the construction phase of the project. The PMOC should verify that the review items are consistent and updated in applicable PMPs.

Review Item	Review Objective	Review Method
Third-Party Agreements       To confirm that necessary third-party agreements are in place to support the construction		Review third-party agreements in the overall context of the project with qualified personnel. Particular attention should be provided to design standards; utility agreements; agreement with other railroads; inclusion of enhancements; concurrent non-project activities, and timing of reviews, permits, land transfers, and funds transfers.
Real estate requirements in contract documents	To confirm that all necessary right-of- way (ROW) will be available for use by the contractor at Notice to Proceed (NTP). If all ROW will not be available at NTP, confirm that the contract documents (including plans) clearly identify the following:	Compare the real estate requirements in the contract documents with the approved Real Estate Acquisition and Management Plan (RAMP).
	<ul> <li>Which parcels are not immediately available</li> <li>When each parcel will be available for use by the contractor</li> </ul>	

<b>Review Item</b>	Review Objective	Review Method	
	• Any associated contract conditions for further delays		
Procurement Policies and Procedures	To ensure Procurement Policies and Procedures are in place and are compliant with Federal policies, ensure a fair bidding environment, and are able to efficiently resolve issues and disputes that may arise during the course of the Construction Contract	s are in place and are with Federal policies, ir bidding environment, and efficiently resolve issues es that may arise during the	
Project Staffing Plan	To ensure that the project sponsor has adequately implemented a project staffing plan that ensures that the necessary qualified staff will be available at an appropriate time to manage and support the work that is being bid	Review staffing plan to ensure it is consistent with the PMP approved for construction.	
Risk Register, Risk and Contingency Management Plan (RCMP)	To confirm that the project sponsor has incorporated appropriate risk mitigation measures into the contract plans and specifications To confirm that the project sponsor has a plan to mitigate project budget and schedule risks if they come to fruition	Review Risk Register and RCMP and compare to contract documents by qualified staff.	
Financing Plan To ensure that money will be available to pay the contractor for the work on a timely basis		To be performed by the Financial Management Oversight Contractor (FMOC). Review the funds availability in the context of all project requirements to confirm that adequate funds will be available on the schedule called out in the bid package. Confirm the current validity of any underlying assumptions associated with the Financing Plan (for example that borrowing will occur at a given time).	

The PMOC readiness report shall include:

- 1. Executive summary in three pages or less that includes the following:
  - a) Summary of findings of the procurement documents related to the project's scope, schedule, and cost

- b) Listing of any significant omissions or uncertainties and characterization of them in terms of likelihood (probable, remote, improbable) and their consequence (catastrophic, critical, serious, moderate, marginal)
- c) Professional opinion regarding the consistency of the project scope, schedule and cost, and the project sponsor's ability to manage the project
- d) Statement of potential range of procurement cost (bids), lower and upper bound
- e) Recommendation to FTA (if the PMOC considers a recommendation appropriate) of the readiness of the project (or procurement package) to proceed with bidding (or advertisement)
- 2. Review procedures and personnel (including capsule of reviewers' qualifications; The reviewers should be the same individuals that performed the prior review of the project documents, and should be regular participants in project reviews, to the extent possible.)
- 3. Readiness of plans and specifications for the type of procurement contemplated
  - a) Design completeness
  - b) Contract terms and conditions are consistent with Federal requirements, including Buy America requirements.
  - c) Procurement bid and award process is consistent with best-industry practices.
  - d) Cost Estimate accurately reflects contractual requirements.
- 4. Consistency with Environmental Document and Project Plans
  - a) Consistent with Environmental Documents and Project Development Plans
  - b) Consistent with PMP, RAMP, and QAPP
  - c) Consistent with Risk Assessment and RCMP
  - d) Consistent with project master schedule
  - e) Consistency with project budget
- 5. Agency Readiness
  - a) Organization and staffing
  - b) Third-party agreements and project sponsor-furnished permits
  - c) Funding availability (FMOC)
- 6. Conclusions and Recommendations (detailed)

Provide appropriate back-up information in appendices

# 7.0 REPORTS, PAPERS, PRESENTATIONS

The PMOC shall provide the COR/ACOR with a written report, formatted in compliance with OP 01, of their findings, analyses, recommendations, professional opinions, and description of the review activities undertaken, as well as other supporting information.

After the COR/ACOR has transmitted formal acceptance of the report, the PMOC should share the report with the project sponsor. If there are differences of opinion between the PMOC and the project sponsor regarding the PMOC's findings, the COR/ACOR may direct the PMOC to reconcile their findings with the project sponsor and provide the COR/ACOR with a report addendum covering the modifications agreed upon by the project sponsor and PMOC.

When directed by the COR/ACOR, the PMOC shall perform data analysis and develop data models that meet FTA requirements using Microsoft Office products, such as Excel and Word, and use FTA templates when provided.

Upon approval by the COR/ACOR, the PMOC may add other software as required, but they should provide the COR/ACOR with documentation and report data when complete.

	Desired Outcome	Performance Requirement	Checklist	Performance Measure	Acceptable Quality Level	Monitoring Method
	The Project Management Oversight Contractor (PMOC) shall review and analyze project documents to determine that the project sponsor has advanced the project to the position of being ready to procure construction work.	R1a. The PMOC shall develop and document a process for review and analysis of project documents to confirm that the project sponsor has advanced to the position of readiness to procure construction work.		M1a. Review of the process documentation.	Q1a. The PMOC provides documentation of the process.	MM1a. Periodic review by the Federal Transit Administration (FTA) or its agent.
1		R1b. The PMOC shall use their process and project management judgment to review and analyze project documents to determine that project sponsor has advanced the project to the position of being ready to procure construction work.		M1b. Documented review and analysis of project documents to determine that project sponsor has advanced the project to the position of being ready to bid construction work.	Q1b. The PMOC conducts a review and provides internal verification that the documented process has been followed.	MM1b. Periodic review by FTA or its agent and the PMOC's internal verification.
2	The PMOC shall form a professional opinion as to whether the construction procurement packages and supporting documentation are complete, accurate, and consistent with the Project	R2a. The PMOC shall perform a review and analysis of the project documentation and confirm that the construction procurement package,		M2a. The PMOC's review and opinion as to the readiness of the construction procurement package for bidding demonstrates sound	Q2a. The PMOC offers their professional opinion of the readiness of the construction procurement package for bidding.	MM2a. Periodic review by FTA or its agent.

Appendix A: Acceptable Quality Level OP 53 Readiness to Procure Construction Work September 2023 Page A-1 of 2

	Desired Outcome	Performance Requirement	Checklist	Performance Measure	Acceptable Quality Level	Monitoring Method
	Management Plan (PMP) and confirm that the project sponsor's organization is prepared to successfully manage the procurement and construction processes.	including plans, specifications, and contract provisions is ready for bidding.		management, logical engineering practices, and professional experience.		
3	The PMOC shall provide FTA with a written report of their findings, analysis, recommendations, and professional opinions.	R3. The PMOC shall present their findings, analysis, recommendations, and professional opinions to FTA in a written report and, when directed by FTA, augment the written report with oral presentations.		M3. There is a review of the PMOC's presentation of findings, analysis, recommendations, and professional opinions by FTA.	Q3. Reports and presentations are professional, clear, concise, and well written. The findings and conclusions have been reconciled with other PMOC reports and have been reconciled with the project sponsor to the extent possible.	MM3. Periodic review by FTA or its agent.



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# APPENDIX B: ACRONYMS

Acronym	Term
ACOR	Alternate Contracting Officer's Representative
ADA	The Americans with Disabilities Act
AGC	Associated General Contractors of America
ATC	Alternative Technical Concepts
AVS	Associate Value Specialist
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor and Statistics
BRF	Beta Range Factor
ВҮ	Base Year
CATEX or CE or CX or Exclusion	Categorical Exclusion
CCIP	Contractor Controlled Insurance Program
CE	Categorical Exclusion
CER	Cost Estimating Relationship
CFR	Code of Federal Regulations
CIG	Capital Investment Grant
CLIN	Contract Line Item Number
СМ	Construction Manager
CM/GC	Construction Manager/General Contractor

Appendix B: Acronyms OP 53 Readiness to Procure Construction Work October 2023 Page B-1 of 7

Acronym	Term	
CMAR	Construction Manager at Risk	
COR	Contracting Officer's Representative	
СРМ	Critical Path Method	
CPTED	Crime Prevention Through Environmental Design	
CR	Constructability Review	
CVS	Certified Value Specialists	
DB	Design-Build	
DBB	Design-Bid-Build	
DBE	Disadvantaged Business Enterprise	
DBF	Design-Build-Finance	
DBFOM	Design-Build-Finance-Operate and Maintain	
DBOM	Design-Build-Operate and Maintain	
DEIS	Draft Environmental Impact Statement	
DF	Designated Function	
DHS	Department of Homeland Security	
DTS	Department of Transportation Services	
EA	Environmental Assessment	
EIS	Environmental Impact Statement	
EMP	Emergency Management Plan	

Acronym	Term	
ENR	Engineering News-Record	
EPCM	Engineering/Procurement/Construction Management	
ESWA	Early Systems Work Agreement	
FEIS	Final Environmental Impact Statement	
FEMA	Federal Emergency Management Agency	
FFGA	Full Funding Grant Agreement	
FHWA	Federal Highway Administration	
FLSSC	Fire/Life Safety and Security Committee	
FONSI	Finding of No Significant Impact	
FRA	Federal Railroad Administration	
FTA	Federal Transit Administration	
GAO	Government Accountability Office	
GC	General Contractor	
GC/CM	General Contractor/Construction Manager	
GMP	Guaranteed Maximum Price	
HAZMAT	Hazardous Materials	
IP	Implementation Plan	
LONP	Letter of No Prejudice	
LPA	Locally Preferred Alternative	

Acronym	Term
MBE	Minority Business Enterprise
MCC	Management Capacity and Capability
MDBF	Mean Distance Between Failures
МРО	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NTE	Not-to-Exceed
NTP	Notice to Proceed
O&M	Operation and Maintenance
OCIP	Owner Controlled Insurance Program
ODCs	Other Direct Costs
OHA	Operational Hazard Analysis
OIG	Office of Inspector General
OMP	Operations and Management Plan
ОР	Oversight Procedure
Р3	Public Private Partnership
PCMG	Project and Construction Management Guidelines
PD	Project Development
PDM	Project Delivery Method
РНА	Preliminary Hazard Analysis
РМО	Project Management Oversight

Acronym	Term
РМОС	Project Management Oversight Contractor
РМР	Project Management Plan
РОР	Project Oversight Plan
PTASP	Public Transportation Agency Safety Plan
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
RAMP	Real Estate Acquisition Management Plan
RAP	Rail Activation Plan
RCMP	Risk and Contingency Management Plan
RET	Risk Evaluation Tool
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
ROD	Record of Decision
ROW	Right-of-Way
RSD	Revenue Service Date
S/DBE	Small/Disadvantaged Business Enterprises
SABCE	Stripped and Adjusted Base Cost Estimate
SABS	Stripped and Adjusted Base Schedule
SAVE	Society of American Value Engineers

Acronym	Term
SCC	Standard Cost Category
SCIL	Safety Certifiable Items List
SGR	State of Good Repair
SIT	System Integration Testing
SITP	Systems Integration Test Plan
SOP	Standard Operating Procedure
SOW	Scope of Work
SSCVR	Safety Certification Verification Report
SSGA	Small Starts Grant Agreement
SSI	Sensitive Security Information
SSMP	Safety and Security Management Plan
STIP	Statewide Transportation Improvement Program
SYGA	Single Year Grant Agreement
TAR	Travel Authorization Request
ТВМ	Tunnel Boring Machine
ТСС	FTA Office of the Chief Counsel
TCRP	Transit Cooperative Research Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery

Acronym	Term
TIP	Transportation Improvement Program
TOD	Transit-Oriented Development
ТРЕ	FTA Office of Planning and Environment
ТРМ	FTA Office of Program Management
TRB	Transportation Research Board
TSA	Transportation Security Administration
TVA	Threat and Vulnerability Assessment
URA	Uniform Relocation Assistance and Real Property Acquisition Act
U.S.C.	United States Code
VE	Value Engineering
VECP	Value Engineering Change Proposals
WBE	Women Business Enterprise
WBS	Work Breakdown Structure
YOE	Year of Expenditure