

Texas Department of Transportation
BOOK 2 – TECHNICAL PROVISIONS
FOR
US 181 HARBOR BRIDGE PROJECT
DESIGN-BUILD PROJECT

ATTACHMENT 2-1
PROJECT MANAGEMENT PLAN CONTENTS

Attachment 2-1 – Project Management Plan Contents

The Project Management Plan - Contents and Schedule for provision of the component parts

Legend

A = Submitted by Developer no later than 30 days after NTP1 and Approved by TxDOT prior to commencement of Design Work

A1 = Submitted by Developer no later than 30 days after NTP1 and concurrence by TxDOT prior to issuance of NTP2

B = Submitted by Developer no later than 90 days after NTP1 and Approved by TxDOT prior to commencement of Construction Work

Part	Ref	Section	Contents	Required by
1. Project Administration				
		Organization	Organization diagram	A
		Personnel	Names and contract details, titles, and job roles	A
		Subcontractors	Subcontracting Plan	A
		Schedule	Project Baseline Schedule in accordance with Section 2	A
		Quality Control	Procedures to establish and encourage continuous improvement	A
		Audit	Procedures to facilitate review and audit by TxDOT	A
		PMP Update	Procedures for preparation of amendments and submission of amendments to any part of the PMP (See Note 1)	A
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use.	A
			Document management procedures in compliance with the Technical Provisions Section 2.	A
2. Quality Management Plan				
2A. Professional Services Quality Management Plan				
		Organization	Developer's main contractual arrangements	A
			Organizational structure covering the activities to be performed in accordance with the Contract Documents	A
		Personnel	Resource Plan for the Developer and its Subcontractors	A
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	A

Part	Ref	Section	Contents	Required by
			Names and contact details, titles, job roles and specific experience required for the Key Personnel and for other principal personnel during design	A
		Personnel (continued)	Names and contact details, titles, job roles of principal personnel for Subcontractors and any third party with which Developer will coordinate activities.	A
		Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during design	A
		Subcontractors	Overall control procedures for Subcontractors, including consultants and subconsultants	A
			Responsibility of Subcontractors and affiliates	A
			Steps taken to ensure Subcontractors and Suppliers meet the obligations imposed by their respective Contracts	A
		Interfaces	Interfacing between the Developer, Subcontractors and the independent certifiers during design including interfaces between the structural design auditor, the safety auditor, and the quality reviewer	A
			Coordination with Utility Owners	A
		Environmental	Control of the interface between environmental requirements (including landscaping) and the design of the Project	A
		Procedures	Procedures describing how the principal activities will be performed during the design stage: to include geotechnical site investigation, surveys and mapping, environmental management, safety audit, structural audit, and checking	A
		Quality Control/Quality Assurance	Quality control and quality assurance including a resource table for monitoring and auditing all design services, design review and certification, verification of plans	A
			Procedures to establish Developer's hold points in the design process where checking and review will take place	A
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT and Governmental Entities	A
			Procedures to establish and encourage continuous improvement (corrective/preventive action)	A
		Audit	Name of Developer's representative(s) with defined authority for establishing, maintaining, auditing and reporting on the PSQMP	A
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	A
			Procedures for scheduling and conducting audits of the Developer's compliance with the PSQMP, including subcontractors, with provision that auditors are independent of the activity being audited	A
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	A

Part	Ref	Section	Contents	Required by
			Document management procedures in compliance with the Technical Provisions Section 2	A
2B. Construction Quality Management Plan				
		Organization	Developer's main contractual arrangements	A
			Organizational structure covering the activities to be performed in accordance with the Contract Documents	A
		Personnel	Resource Plan for the Developer and its Subcontractors	B
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	B
			Names and contact details, titles, job roles and specific experience required for the Key Personnel as related to construction	A
			Names and contact details, titles, job roles of principal personnel for Subcontractors and any third party with which Developer will coordinate his activities	B
		Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during construction	A
		Subcontractors	Overall control procedures for Subcontractors, including consultants and subconsultants	B
			Responsibility of Subcontractors and affiliates	A
			Steps taken to ensure Subcontractors and Suppliers meet the obligations imposed by their respective Contracts	B
		Interfaces	Interfacing between the Developer, Subcontractors, and independent certifiers during construction, including any testing contractor	A
		Procedures	Traffic Management Plan	B
		Quality Control/Quality Assurance	Procedures for construction quality control and quality assurance	B
			Control, identification and traceability of materials, including any material or samples temporarily or otherwise removed from site for testing or other reasons.	B
			Examinations and audit of Construction Work, review of examination and audit, issue of certificates	B
			Observation and reporting of all tests in compliance with Section 2	B
			Procedures for tests and inspections for the purpose of the Subcontractor certifying that prior to burying, each part of the Works is complete and conforms to the Contract Documents	B

Part	Ref	Section	Contents	Required by
		Quality Control/Quality Assurance	Quality control and quality acceptance procedures including a resource table for monitoring and auditing during construction any work and testing undertaken by Subcontractors and Suppliers both on and off Site	B
			Procedures to establish Developer's hold points in construction	B
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT and Governmental Entities	B
			Procedures to establish and encourage continuous improvement (Corrective/Preventive Action)	A
		Audit	Inspection and test plans that identify the performance and/or databases to be used for recording the inspection and test results and methodology for transmitting acceptance testing and inspection reports to TxDOT	B
			Name of Developer's representative with defined authority for establishing, maintaining, auditing and reporting on the CQMP	A
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority.	B
			Procedures for scheduling and conducting audits of the Developer's compliance with the CQMP, including subcontractors, with provision that auditors are independent of the activity being audited	B
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	B
			Document management procedures in compliance with the Technical Provisions Section 2	A
2C. O&M Work Quality Management				
		Organization Personnel Offices and Equipment Subcontractors Interfaces Procedures Audit	Consistent with general quality management requirements in Section 2 of the Technical Provisions and addressing the items required by Section 19.7 of the Technical Provisions.	See TP Table 19-5
3. Comprehensive Environmental Protection Plan (CEPP)				
		Organization	Developer's main contractual arrangements	A
			Organizational structure covering the activities to be performed in accordance with the Contract Documents	A
			Environmental Contact Tree	A

Part	Ref	Section	Contents	Required by		
		Personnel	Resource Plan for the Developer and its Subcontractors	B		
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	A		
		Personnel	Names and contact details, titles, job roles and specific experience required for Key Personnel and for other environmental personnel	A		
			Implement Environmental Protection Training Program for all employees in accordance with Section 4	A		
		Subcontractors	Overall control procedures for Subcontractors, including consultants and subconsultants	A		
			Responsibility of Subcontractors and Affiliates	A		
		Environmental	Establishment of the component parts of the Environmental Compliance and Mitigation Plan (ECMP)	B		
			Procedures for implementation of the Environmental Protection Training Program for all Developer employees and subcontractors	B		
			Procedures for environmental compliance	B		
		Quality Control and Quality Acceptance	Procedures to ensure accuracy, completion, and quality in submittals to TxDOT and Governmental Entities	A		
			Procedures to establish and encourage continuous improvement (Corrective/Preventive Action)	A		
		Audit	Name of Developer's representative(s) with defined authority for establishing, maintaining, auditing and reporting on the CEPP	A		
			Procedures for scheduling and conducting audits of the Developer's compliance with the CEPP, including subcontractors, with provision that auditors are independent of the activity being audited	A		
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	A		
			Identify environmental documentation and reporting requirements	A		
		4. Public Information and Communications Plan				
				Organization	Developer's main contractual arrangements	A
					Organizational structure covering the activities to be performed in accordance with the Contract Documents.	A
				Personnel	Resource Plan for the Developer and its Subcontractors	A
					Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including co-location of Key Personnel and description of approach to coordinating work of off-site personnel	A
Names and contact details, titles, job roles and specific experience required for Key Personnel and for other principal personnel	A					

Part	Ref	Section	Contents	Required by
		Personnel	Names and contact details, titles, job roles of principal personnel for Subcontractors and any third party with which Developer will coordinate his activities	A
		Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during design	A
		Subcontractors	Overall control procedures for Subcontractors, including consultants and subconsultants	A
			Responsibility of Subcontractors. and affiliates	A
		Subcontractors	Steps taken to ensure Subcontractors and Suppliers meet the obligations imposed by their respective Contracts	A
			Procedures for implementation of Environmental Protection Training Program for employees of Subcontractors	A
		Interfaces	Procedures for liaison with the public, the media and other Customer Groups in accordance with Section 3 and the press media policy of TxDOT	A
			Procedures to coordinate with Project Stakeholders such as municipalities, counties, MPOs, RMAs and other Customer Groups	A
		Procedures	Procedures describing how the principal activities will be performed	A
		Quality Control	Quality control procedures including a resource table for monitoring and auditing all public information and communication services	A
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and Customer Groups	A
		Quality Control	Procedures to establish and encourage continuous improvement (Corrective/Preventive Action)	A
		Audit	Name of Developer's representative with defined authority for establishing, maintaining, auditing and reporting on the PICP	A
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	A
			Document management procedures in compliance with the Technical Provisions Section 2	A
			Identify environmental documentation and reporting requirements	A
5. Health and Safety				
			Policies, plans, training programs, Work Site controls, and Incident response plans to ensure the health and safety of personnel involved in the Project and the general public affected by the Project	A1
			Procedures for immediately notifying TxDOT of all incidents arising out of or in connection with the performance of the Work	A1

Part	Ref	Section	Contents	Required by
6. TxDOT – Developer Communications Plan				
			The manner in which the Developer’s organization will respond to unexpected requests for information, communicate changes or revisions to necessary Developer personnel, and notify affected stakeholders before and after changes are made	A
			Processes and procedures for communication of Project information between the Developer’s organization and TxDOT	A
7. ROW Acquisition Plan				
		Organization	Developer’s main contractual arrangements	A
			Organizational structure covering the activities to be performed in accordance with the Contract Documents	A
		Personnel	Resource plan for the Developer and its Subcontractors	A
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	A
			Names and contact details, titles, job roles and specific experience required for the Key Personnel as related to ROW acquisition and Utility Adjustment activities.	A
			Names and contact details, titles, job roles of principal personnel for Subcontractors and any third party with which Developer will coordinate activities	A
		Subcontractors	Overall control procedures for Subcontractors, including consultants and subconsultants	A
			Responsibility of Subcontractors and affiliates	A
			Steps taken to ensure Subcontractors and Suppliers meet the obligations imposed by their respective Contracts	A
			Procedures for implementation of the Environmental Protection Training Program for employees of Subcontractors in accordance with Section 4	A
		Interfaces	Interfacing between the Developer, Subcontractors and independent certifiers during Project ROW acquisition including the interfaces between Project ROW acquisition, Project design, and any quality reviewer	A
			Coordination with Utility Owners	A
			Utility Adjustment Plan	B
		Relocation	Relocation Plan (Right of Way)	B
		Environmental	Control of the interface between environmental requirements (including Hazardous Materials and demolition) and Project ROW acquisition activities	A
			Applicable procedures for the Hazardous Materials Management Plan in accordance with Section 4	A

Part	Ref	Section	Contents	Required by
		Environmental	Applicable procedures to implement the Stormwater Pollution Prevention Plan (SW3P), recycling program and waste management in accordance with Section 4	A
			Address Project Environmental Mitigation Plan (PEMP) requirements	A
		Schedule Procedures	Logic linked ROW acquisition activities on a parcel-by-parcel basis as part of the Project Baseline Schedule, including adequate time periods for TxDOT review and condemnation activities in accordance with Section 7	A
			Procedures describing how the principal activities will be performed during the Project ROW acquisition, whether directly undertaken or subcontracted	A
		Quality Control	Procedures to ensure accuracy, completion, and quality in submittals to TxDOT and Governmental Entities	A
			Procedures to establish and encourage continuous improvement	A
			Quality control procedures and quality review standards for Project ROW acquisition in accordance with Section 7	A
			Procedures for environmental compliance	A
		Audit	Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	A
		Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	A
			Document management procedures in compliance with the Technical Provisions Section 2	A
			Identify environmental documentation and reporting requirements	A
		8. Risk Management Plan		
			Procedures for identifying, assessing, analyzing, controlling and managing project risks to meet its obligations under the Agreement.	A
9. Corpus Christi Ship Channel Plan				
		Procedures	Consistent with requirements in Section 2.9.1 of the Technical Provisions.	A
		Requirements	Consistent with requirements in Section 2.9.2 of the Technical Provisions.	A
		Sweep and Sounding Surveys	Consistent with requirements in Section 2.9.3 of the Technical Provisions.	A
10. Sustainability Plan				

Part	Ref	Section	Contents	Required by
		Energy and Energy Efficiency	Describe plans for maximizing energy efficiency throughout the Project, including: <ul style="list-style-type: none"> Minimizing energy and fuel usage during construction. Innovative ideas for incorporation of energy generation and use of renewable energy sources. 	A
		Community and Environmental Justice	Describe the commitment to environmental quality and enhancement above and beyond the requirements of the EIS, including: <ul style="list-style-type: none"> Minimizing air quality degradation during construction. Minimizing and mitigating for disproportionately high and adverse human health or environmental effects of construction activities on minority populations and low-income populations. Commitment to sustainable storm water management, specifically the incorporation of permanent Best Management Practices for storm water management. Commitment to providing durable permanent Best Management Practice features that minimize long term maintenance. Proposals for quantifying and minimizing the project's carbon footprint. 	A
		Green Building	Describe plans for locating the Project Management Office in existing, currently unused office space, and plans (if any) for the use of a LEED (Leadership in Energy and Environmental Design) certified Green Building for the Project Management Office.	A
		Waste Reduction and Recycling	Describe the approach to minimizing the amount of waste generated by the project. The plan shall also describe the Developer's plans for maximizing the re-use of materials, including construction material from structures and facilities demolished as part of this project. The Developer may also include plans to incorporate into the project recycled materials generated off site. Any such plan must be in conformance with Contract Documents.	A
		Green Project Administration	Describe the overall commitment to green project administration, including: <ul style="list-style-type: none"> Tracking all environmental commitments and ensuring completion and appropriate documentation of those commitments. Providing construction personnel with the opportunity for construction environmental training, including best practices for minimizing impacts to the human and natural environment. 	A
		Materials and Resources	Describe the commitment to using materials produced in a manner that minimizes ecosystem degradation and reduces lifecycle impacts from extraction, production, and transport of virgin materials.	A
		Construction Practices	Describe the commitment to using construction practices that minimize impacts to the environment and community surrounding the project.	A

Part	Ref	Section	Contents	Required by
		Education and Demonstration of Energy Efficiency	Describe proposal to develop and implement at least one project feature that publically demonstrates energy efficiency. This feature shall be a visible element of the project that demonstrates the commitment to energy efficiency. The feature can also serve to educate the public on other sustainable project elements and practices. Potential features could include, but are not limited to, the following: <ul style="list-style-type: none"> • Use of solar panels to generate a portion of the energy needs of the project. • Use of wind turbine(s) to generate a portion of the energy needs of the project. • Use of light-emitting diode (LED) fixtures for bridge illumination. 	A
		Sustainability Level	Identification of the number of points that the Project will score as determined in a joint Developer/Department/FHWA INVEST workshop following the INVEST 1.0 Project Development Module and using the Urban Extended scorecard. The Proposer shall indicate the number of points that the Project will score as follows: points scored that are attributable to previous Department work, points scored by the Developer executing the Project Scope, and points that will be provided by the actions of the Developer.	A
11	Maintenance Management Plan			
		General Requirements	Consistent with Section 19.6.2 of the Technical Provisions	See TP Table 19-5
		O&M Deliverable Schedule	Consistent with Section 19.6.3 of the Technical Provisions	See TP Table 19-5
		Document Management	Consistent with Section 19.6.4 of the Technical Provisions	See TP Table 19-5
		Communications	Consistent with Section 19.6.5 of the Technical Provisions	See TP Table 19-5
		Maintenance Safety	Consistent with Section 19.6.6 of the Technical Provisions	See TP Table 19-5
		Maintenance Hazmat	Consistent with Section 19.6.7 of the Technical Provisions	See TP Table 19-5
		Maintenance Environmental	Consistent with Section 19.6.8 of the Technical Provisions	See TP Table 19-5
		MMS	Consistent with Section 19.6.9 of the Technical Provisions	See TP Table 19-5
		Maintenance Transition	Consistent with Section 19.8 of the Technical Provisions	See TP Section 19.8
		Incident Management	Consistent with Section 19.10.5 of the Technical Provisions	See TP Table 19-5

Part	Ref	Section	Contents	Required by
		Snow and Ice Control	Consistent with Section 19.10.7 of the Technical Provisions	See TP Table 19-5
		Durability Plan	Consistent with Section 19.14.3 of the Technical Provisions	See TP Table 19-5
		Handback Plan	Consistent with Section 19.14.2 of the Technical Provisions	See TP Section 19.14

Notes to Attachment 2-1:

- 1) The PMP shall be updated via the submittal of a redline amendment and cover sheet identifying changes whenever any of the following conditions exist:
 - A plan or procedure is required to be updated in accordance with Section 6.4 of the Agreement;
 - A plan or procedure no longer adequately addresses the matters it was intended to address;
 - An audit by the Developer or by TxDOT identifies a need for an update to the PMP;
 - A plan or procedure no longer represents current or appropriate practice;
 - Organizational structure changes require revision to a plan;
 - Developer is undertaking, or plans to undertake, activities not covered within a current plan; or
 - Scope or schedule changes require revision to a plan.