# Design-Build Project ScalabilityMemo

In response to the industry, Georgia DOT has developed a project ranking system to categorize Design-Build (DB) projects representing varying levels of complexity and risk ranging from low to high. Each project will be placed in one of three categories based on a variety of factors evaluated on a project by project basis, including the overall contract value, construction duration, complexity, and scope.

These submittal requirements are based on the information needed to communicate and document the Design-Builder's management and construction plan. These submittals will be used for the final record of the project. The below submittals are only required for a specific category if there is a check mark in the category's column. Additionally, if a submittal is required and in **bold** font, the deliverable requirements are scalable depending on the project's category. Detail for each scalable deliverable can be found in the section below the Submittals Table.

Submittal Item	Categories		
	I	II	
Project Field Office		TBD	$\checkmark$
PMP Executive Summary	$\checkmark$	✓	✓
Design-Builder's Organization Description	√	✓	$\checkmark$
Team Communications and Partnering Plan		TBD	✓
DBE Performance Plan	TE	BD Based on Proje	ct
OJT Plan	TBD Based on Project		
Quality Management Plan (QMP) General Provisions	√	✓	✓
Administrative Quality Management Plan (AQMP)	$\checkmark$	$\checkmark$	$\checkmark$
Design Quality Management Plan (DQMP)	$\checkmark$	✓	✓
Construction Quality Management Plan (CQMP)	$\checkmark$	✓	✓
Basis of D&C	$\checkmark$	✓	✓
Utility Management Plan	$\checkmark$	✓	✓
Transportation Management Plan (TMP)		TBD	✓
Comprehensive Environmental Protection Plan		$\checkmark$	√
Maintenance Management Plan (MMP)	$\checkmark$	$\checkmark$	√
ITS Infrastructure Implementation Plan	TE	BD Based on Proje	ct
ROW Acquisition Plan	TBD Based on Project		
Safety Plan	$\checkmark$	$\checkmark$	$\checkmark$
Project Schedule Workplan (PSWP)	$\checkmark$	$\checkmark$	$\checkmark$
D&C Closeout Plan	$\checkmark$	$\checkmark$	$\checkmark$
Project Baseline Schedule	$\checkmark$	✓	✓
Monthly Schedule Updates		$\checkmark$	$\checkmark$
Two-Week Lookahead Schedule	$\checkmark$	$\checkmark$	$\checkmark$
Restoration/Mitigation Plans		TBD	✓
Hazardous Materials Management Plan		TBD	✓
Materials Indexation	TBD Based on Project Duration		
3 <sup>rd</sup> Party Hazardous Materials Risk Sharing	$\checkmark$	$\checkmark$	$\checkmark$

Table 1: Scalable Submittal Requirements by Category



Category I Scalable Submittal Requirements:

Project Field Office: Not required.

### **Category I Management Plan Requirements:**

- 1. Quality Management Plan: Corporate Quality Plan Acceptable
- 2. Administrative Quality Management Plan: Corporate Quality Plan Acceptable
- 3. Design Quality Management Plan: Corporate Quality Plan Acceptable
- 4. Construction Quality Management Plan: Corporate Quality Plan Acceptable
- 5. Safety Plan: Corporate Safety Plan Acceptable

**Category I Scheduling Requirements:** Are based on the basic scheduling information needed to communicate the DB Team's work plan and to assess progress of the Work between NTP 1 and Final Acceptance. The schedule information will also be used to plan for and manage Georgia DOT's resources, expenditures, traffic, as well as to communicate with the general public. The Category I Schedule submission requirements are as follows:

- 1. Schedule of Values (SOV): Requirements per TP Section 2.4 (Project Schedule and Schedule of Values).
- 2. **Baseline Project Schedule**: In tabular format (e.g., MS Excel) showing individual activities from preconstruction phase (NTP1), through the construction phase (NTP3), through final acceptance detailing how the project will be accomplished. A bar-chart or CPM schedule may be substituted, at the Design-Builders Option. Individual schedule submittals as required:
  - a. NTP1 Baseline Project Schedule: Resubmitted Proposal Schedule with updated NTP1 date.
  - b. **NTP2 Baseline Project Schedule**: Updated NTP1 Baseline Project Schedule to incorporate additional detail for design and early-work activities.
    - i. NTP 1 and 2 Baseline Project Schedule submittal can be combined for Category 1 Projects
  - c. **NTP3 Baseline Project Schedule**: Updated NTP2 Baseline Project Schedule to incorporate additional design for construction activities.
  - d. **Revised Baseline Project Schedule**: Updated schedule, as applicable, following significant schedule impacts due to change in Work or condition, or significant deviation from the previous accepted Baseline Project Schedule.

#### **Category II Scalable Submittal Requirements:**

**Project Field Office:** If required, will have simplified requirements per TP <u>Attachment 1-5</u> (Project Field Office Requirements)

#### **Category II Management Plan Requirements:**

- 1. Quality Management Plan: Project Specific per TP Section 3 (Design-Build Quality Program)
- 2. Administrative Quality Management Plan: Project Specific TP Section 3 (Design-Build Quality Program)
- 3. Design Quality Management Plan: Project Specific TP Section 3 (Design-Build Quality Program)
- 4. **Construction Quality Management Plan:** Project Specific TP <u>Section 3</u> (Design-Build Quality Program)
- 5. Safety Plan: Project Specific Safety Plan per TP Section 2.7 (Safety)



**Category II Scheduling Requirements:** As the number of operations or level of complexity and associated risks grow, a scheduling tool that allows for adequate planning and scheduling of multiple concurrent activities with considerations for associated project constraints is needed to execute and control the Work. Such scheduling method will require that sufficient details and activity relationships are added to establish inter-dependencies between related activities to form network paths, with which the activities are scheduled. This is necessary to aid the project staff in efficiently planning and managing the Work and available resources. It is also necessary that the project critical path and the minimum time needed to complete the project are established. The Category II Schedule submission requirements are as follows:

- 1. Schedule of Values (SOV): Requirements per TP Section 2.4 (Project Schedule and Schedule of Values).
- 2. Baseline Project Schedule: CPM graphic diagram that utilizes the Precedence Diagram Method (PDM) and clearly delineates the relationships between Work activities. Include and illustrate all significant Work activities that occur throughout the duration of the Agreement in sufficient detail to monitor and evaluate design and construction progress and to denote changes that occur from commencement of the Work to Final Acceptance of the Work. The DB Team will prepare the schedule in MS Project or Primavera P6 CPM software. The Baseline Project Schedule may be submitted in PDF format with the critical path prominently displayed.
  - a. NTP1 Baseline Project Schedule: Resubmitted Proposal Schedule with updated NTP1 date.
  - b. **NTP2 Baseline Project Schedule**: Updated NTP1 Baseline Project Schedule to incorporate additional detail for design and early-work activities.
  - c. **NTP3 Baseline Project Schedule**: Updated NTP2 Baseline Project Schedule to incorporate additional design for construction activities.
  - d. **Revised Baseline Project Schedule**: Updated schedule, as applicable, following significant schedule impacts due to change in Work or condition, or significant deviation from the previous accepted Baseline Project Schedule.

## Category III Scalable Submittal Requirements:

Project Field Office: Required per TP Attachment 1-5 (Project Field Office Requirements)

## Category III Management Plan Requirements:

- 1. Quality Management Plan: Project Specific per TP Section 3 (Design-Build Quality Program)
- 2. Administrative Quality Management Plan: Project Specific TP Section 3 (Design-Build Quality Program)
- 3. Design Quality Management Plan: Project Specific TP Section 3 (Design-Build Quality Program)
- 4. Construction Quality Management Plan: Project Specific TP Section 3 (Design-Build Quality Program)
- 5. Safety Plan: Project Specific Safety Plan per TP Section 2.7 (Safety)

**Category III Scheduling Requirements**: Intended for Design-Build projects with greatest complexity or risk, scheduling to be accomplished utilizing Primavera P6 CPM software, with the option for the Design-Builder to incorporate Price-Loading. This aids both Georgia DOT and the Design-Builder in the planning and management of Work and available resources, as well as in establishing the project critical path and minimum time needed to complete the project, as established. Category III schedule requirements are as follows:



- 1. Schedule of Values (SOV): Requirements per TP <u>Section 2.4</u> (Project Schedule and Schedule of Values), which may incorporate Price-Loading at the Design-Builder's option.
- 2. **Baseline Project Schedule:** Primavera P6 CPM software, per the requirements detailed in TP <u>Section 2.4</u> (Project Schedule and Schedule of Values).
  - a. NTP1 Baseline Project Schedule: Resubmitted Proposal Schedule with updated NTP1 date.
  - b. **NTP2 Baseline Project Schedule**: Updated NTP1 Baseline Project Schedule to incorporate additional detail for design and early-work activities.
  - c. **NTP3 Baseline Project Schedule**: Updated NTP2 Baseline Project Schedule to incorporate additional design for construction activities.
  - d. **Revised Baseline Project Schedule**: Updated schedule, as applicable, following significant schedule impacts due to change in Work or condition, or significant deviation from the previous accepted Baseline Project Schedule.

**Programmatic Submittal Requirements**: While each DB project will have a number of differences in scope, size, scale, and complexity, there are additional submittals beyond those covered in *Table 1* that will be required for every DB project. Programmatic Submittal Requirements are further detailed in *Table 2*.

Table 2: Programmatic Submittal Requirements Table

Submittal Item
Preliminary Design Documents (PDDs)
Final Design Documents (FDDs)
Release for Construction Design Documents
Record Design Documents
Shop Drawings
Meeting Minutes
Site Observation Compliance Report
Subcontracts
Emergency Utility Response Plan
Subsurface Utility Engineering (SUE)
SUE Utility Impact Analysis
Survey Control Package
Location and Design (L&D) Report
Drainage Design Report
Temporary Traffic Control Plans
Traffic Interruption Report
Lane Closure Modification Request
Baseline Element Condition Report (BECR)



**Project Specific Submittal Requirements**: Submittal requirements will be evaluated on a project by project basis to ensure applicability. Projects that do not incorporate applicable disciplines (e.g., ITS, ROW, etc.) may not require submittals for that discipline. Examples of submittals to be evaluated are detailed below in *Table 3*.

Table 3: Project Specific Submittal Requirements Table

Submittal Item
Streaming Cameras
Updated Environmental Resources Impacts Table
Section 404 Permit Application
Georgia Stream Buffer Variance
NPDES Construction General Permit
Utility Adjustment Plans
Environmental Site Assessment (Phase I and II)
Blasting Plans
Pavement Designs
Dynamic Pile Testing Reports
Notice of Intent (NOI) with final/signed Erosion Control Plans
Vibration Control Plan
Hydraulic and Hydrology Report
Post Construction Stormwater Report (PCSR)
Design Exceptions, Variances, and Deviations
FAA Submittals and Coordination
Traffic Signal Timing Plan and Permit
Third Party Communication and Coordination Plans

