



Design-Build Overview

Alternate Project Delivery Office

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Alternate Project Delivery Office

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Topics

- **Guidance Documents Available**
- **Alternate Project Delivery (APD) Office - Structure**
- **Design-Bid-Build / Design-Build Comparison**
- **Project Planning / Implementation**
- **D-B Procurement Process**
- **Pre-Award Activities**
- **Contract Documents**
- **Award / Post-Award Activities**

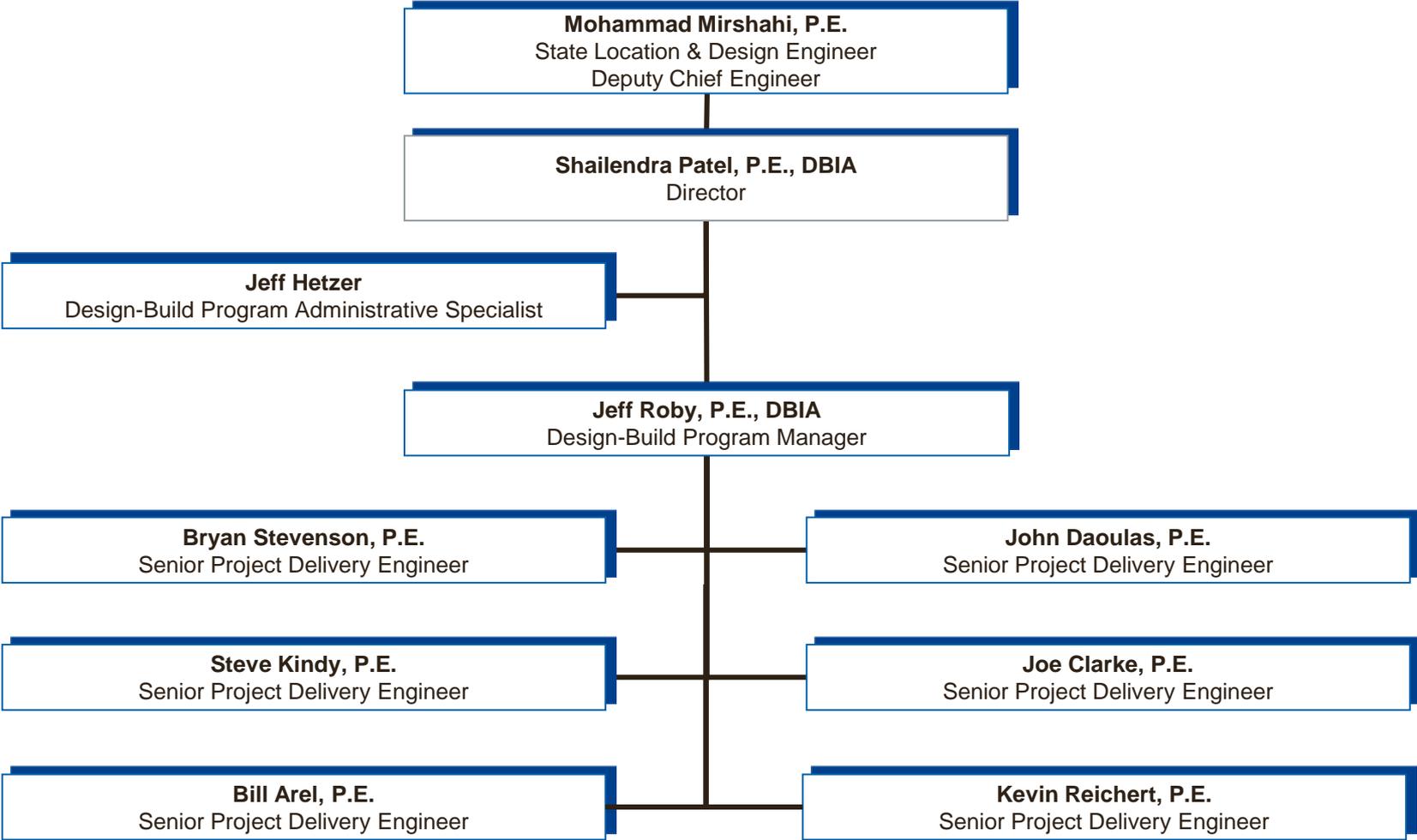
Guidance Documents

- Documents available on VDOT's Local Assistance Division Website
<http://www.viriniadot.org/business/local-assistance.asp>
- **Locally Administered Projects (LAP) Manual**
- Documents available on VDOT's Alternate Project Delivery Website
<http://www.viriniadot.org/business/design-build.asp>
 - **Guidance for Locally Administered Design-Build Projects**
 - **Design-Build Manual**
 - **Design-Build Evaluation Guidelines**
 - **QA/QC Manual**

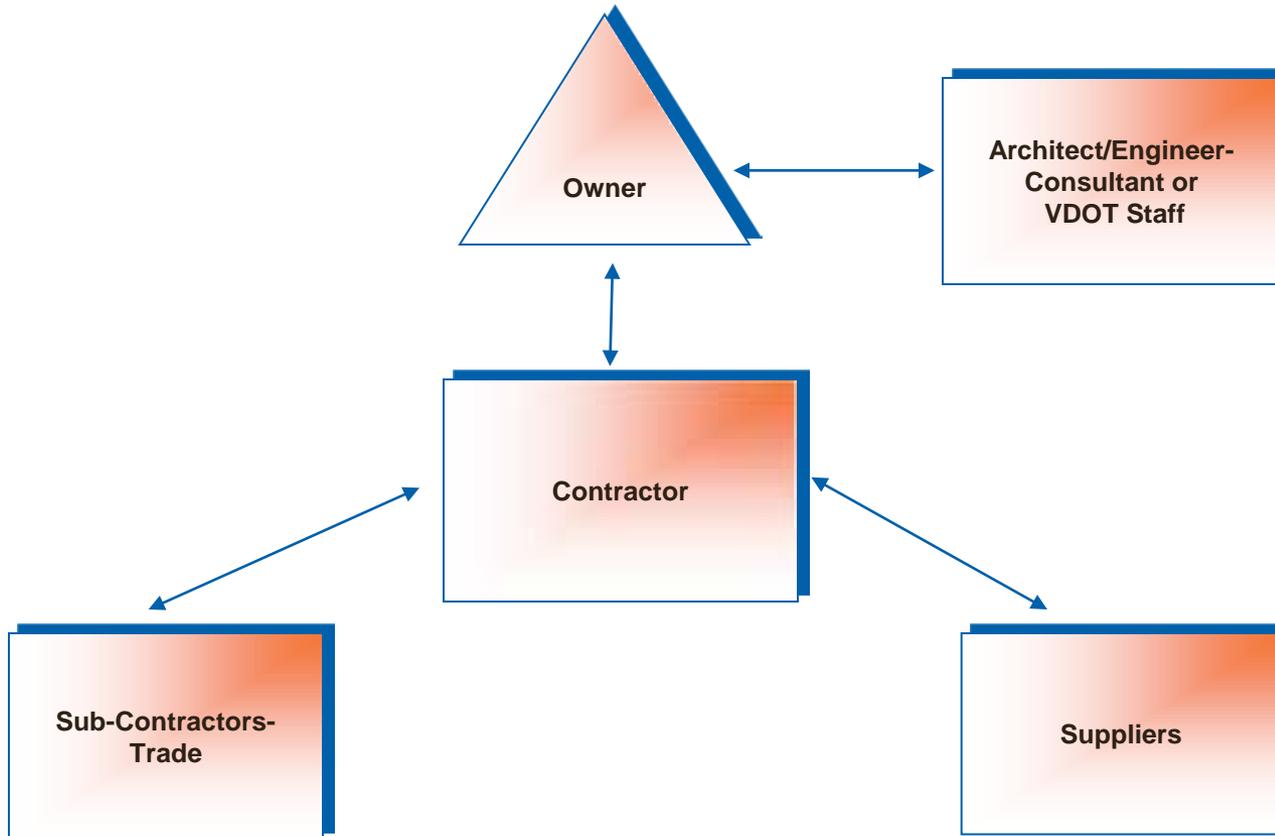
Team Participants

- **Locality Development Team (LDT)**
 - Individuals representing various disciplines at the locality who will play an essential role in the development of contract documents.
- **Locality Project Manager (PM – Locality)**
 - Representative of the locality who is responsible for leading development of the contract documents and contract administration. This individual should be involved in project development from beginning to end and will be an integral part of development of the Contract Documents.
- **VDOT Project Coordinator (VDOT-PC)**
 - Representative from the District Office responsible for assisting the locality with the project development and design-build procurement of Locally Administered design-build project
- **Alternate Project Delivery representative (VDOT-APD)**
 - APD representative will assist VDOT-PC document review process and provides guidance from project inception to completion.

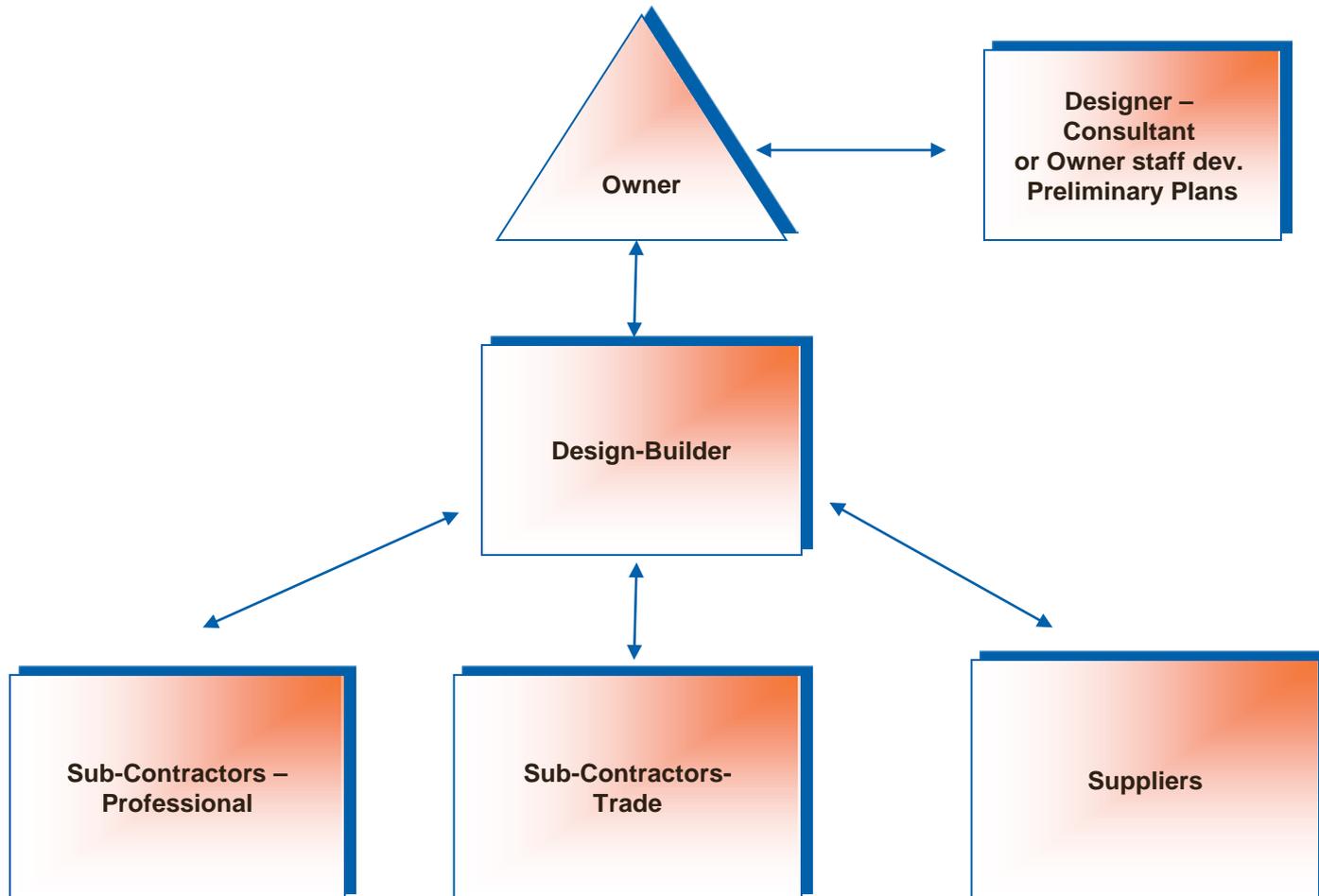
APD Organization Chart



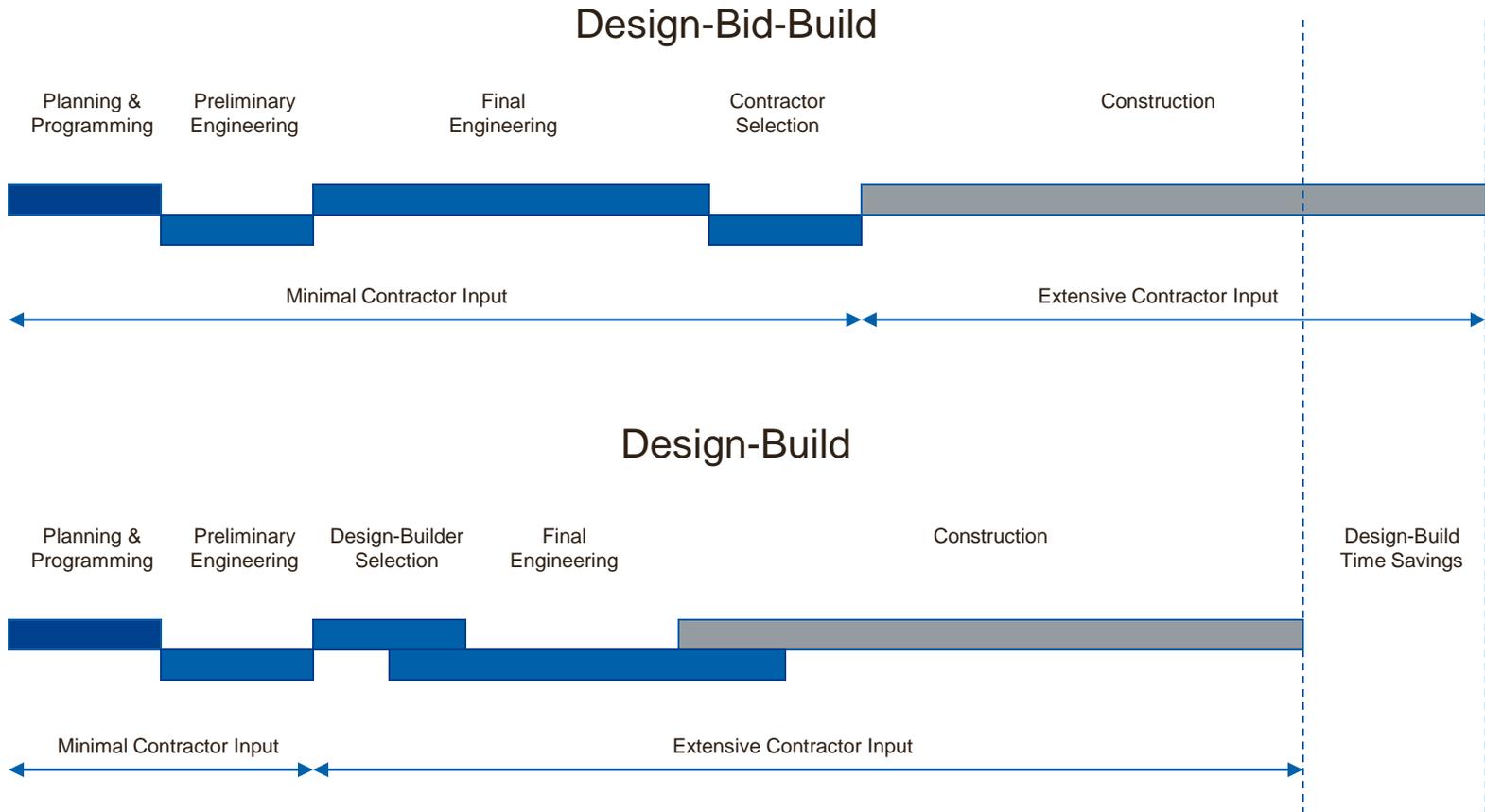
Design-Bid-Build



Design-Build



Sequence of Project Activities



Project Planning

Project Team

- **Budgets and Estimates**
 - **Quantity and Risk Based Estimates**
 - **Consultant Resources Available**
- **Programmatic Approach**
 - **Standard, Repeatable Process**
 - **Locality – Project Definition**
 - **VDOT-PC – Procurement/Technical Oversight**



Project Implementation

- **Locality**
 - Scope
 - NEPA Process
 - Develop RFQ and RFP
 - Local Government Coordination
- **VDOT-PC**
 - Resource to District/Locality
 - Technical Oversight
 - Program Reviews

DESIGN-BUILD PROCUREMENT PROCESS

- **Federal Requirements for the obligation of funds:**
 - Project must be in the TIP and STIP
 - Project must be in SYIP – The funding for PE, R/W and Construction phase shall be identified and allocated through the project cycle
 - Environmental document
 - Finding of public interest (FOPI) signed by the commissioner prior to initiation of the procurement process
 - Public involvement process
 - A Risk Analysis (includes a Risk Assessment Meeting and Risk Management Plan)
 - Value Engineering process
 - Type of procurement (single phase/two phase)
 - Determine conflicts of interest
 - Develop Owner's estimate
 - Determine DBE and OTJ Goals

DESIGN-BUILD PROCUREMENT PROCESS

- **In order to verify the Scope, the following Technical Requirements should be completed by the Locality prior to advertisement:**
 - **Accurate location and utility surveys**
 - **Traffic Analysis (Approved IMR/ IJR for interchange projects)**
 - **Geotechnical Data Report**
 - **Pavement Design**
 - **Conceptual Roadway, Bridge, Drainage, Stormwater and Traffic Plans**
 - **Appropriate RW limits**
 - **Utility designations**
 - **Approved Design Exceptions and Design Waivers**
 - **Location and/ or Design Approval**
 - **RFQ/ RFP Document (Part 1, Part 2, Special Provisions, RFP Information Package) that is complimentary to the other technical requirements**

Contract Documents

Five Parts:

- **Part 1 – Instructions for Offerors**
- **Part 2 – Technical Requirements**
- **Part 3 – Lump Sum Agreement**
- **Part 4 – General Terms & Conditions**
- **Part 5 – Amendments to Standard Specifications**

Part 1 – Instructions for Offerors

Project Overview / Submittal Requirements

- **Project Priorities**
- **Milestone Schedule**
- **Procedural Requirements**
- **Award Processes**

Part 2 - Technical Requirements

Project Parameters

General Rules:

- Describe Desired Design Features
- Describe Explicitly What is NOT Acceptable
- Allow Opportunity for Innovation
- Project Technical Information
 - Standards and Reference Documents
 - RFP Information Package

Part 2 - continued

- **Provide Adequate Geotechnical Data**
 - **Geotechnical Data Report (GDR)**
 - **Minimum Pavement Sections**
 - **Geotechnical Requirements**
- **Perform SERP and Permit Determination for the Largest Footprint or R/W Limits**
- **Provide Adequate R/W limits and Construction Easements**

Part 2 - continued

- **Provide Time of Day and Lane Closure Restrictions**
- **Develop Detailed DB Estimate (Based on Preliminary Plans)**
- **Develop Construction Duration**
- **Coordination between District/Locality and CO Disciplines**

Part 3 - Lump Sum Agreement

- **Contract Documents**
- **Contract Time**
- **Price and Adjustments for Asphalt, Steel, and Fuel**
- **Payment**
- **Project Management**
 - **Schedule - Proposed, Baseline, Updates**
- **Exhibit 1 to Part 3**
 - **Project-Specific Terms**

Part 4 - General Conditions

- **Design-Builder Responsibilities**
- **Scope Validation Period**
 - **Typically 90 to 120 Days from Date of Commencement**
 - **Verify and Validate Proposal**
 - **Identify Errors**
 - **Notify VDOT in Writing Within Time Period**
- **VDOT Responsibilities**

Part 4, continued

- **Payment**
- **Time**
- **Change Order Process**
- **Adjustments & Disputes**

Part 5 - Amendments to Specs

- **Proposal Guaranty**
- **Bonds and Insurance**
- **Value Engineering**
- **Control of Work and Materials**
- **Prosecution of Work**
- **Labor Rates**

Award / Post-Award Activities

- **District/Locality Involvement:**

- Execute the contract
- Conduct Pre-Proposal Meeting
- Attend Project Kickoff Meeting
- Administer the contract
- Review plans for Right-of-Way and Construction Approval
- Participate in Monthly Progress Meetings
- Plan Reviews (21 days)
- Schedule Reviews
- Payment Certification
- Construction Oversight (Independent Assurance and Independent Verification IA/IV)

Locally Administered DB Projects

Lessons learned

- **Project – Route 3 Widening (Spotsylvania County)**
 - **\$25M Project primarily funded through the American Recovery and Reinvestment Act (ARRA)**
 - **VDOT Internal Audit performed a review to ensure compliance with State and Federal laws and regulations**
 - **Issues arose relate to ROW acquisition, QA/QC program and payment**
 - **Must “Follow the Rules” to sustain existing levels of Federal Funding**

Questions?

