Design-Build 101 Part 1 of 2

Alternative Delivery Division

Texas Department of Transportation

Rev. 02
Released: 02/07/2025

Design-Build 101
Part 1 of 2

This is a self-directed overview of Design-Build contracting based on Version 7.0 of the Programmatic Documents

The object shown below on a slide provides reference to the Section of the Programmatic Documents

Sample
Contract Reference:
DBA GC, Sec. XXX

Design-Build 101 Part 1 of 2

Training Goals:

1. Provide participants a better understanding of the Design-Build process
2. Identify the various parts of the Design-Build project delivery method
3. Identify expectations and responsibilities of the entities involved in Design-Build
4. Identify the various parts of the Design-Build project delivery method

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1 References

TxDOT Design-Build Authority

- Texas Transportation Code, Chapter 223, Subchapter F authorizes and governs Design-Build (DB) projects

6 PROJECTS
per fiscal biennium

$150M
minimum

- TAC Title 43, Part 1 regulates DB
- Code of Federal Regulations (CFR) Title 23, Chapter I, Subchapter G, Part 636 details the Federal Highway Administration's (FHWA) regulatory requirements for federally-funded DB projects

Contract Documents (referred to as DB Contract)

Design-Build Agreement (DBA)

Includes DB specific and traditional contract language

Allows flexibility for district specific language

Design-Build General Conditions (DB GC)

Items 1-9 of the DB Specifications are the DB General Conditions and provide the static terms and conditions for DB contracts

Design-Build Specifications Items 10-28 (DBS)

Includes DB programmatic contract language

Allows flexibility for project specifications and district preferences

Capital Maintenance Agreement General Conditions (CMA GC):

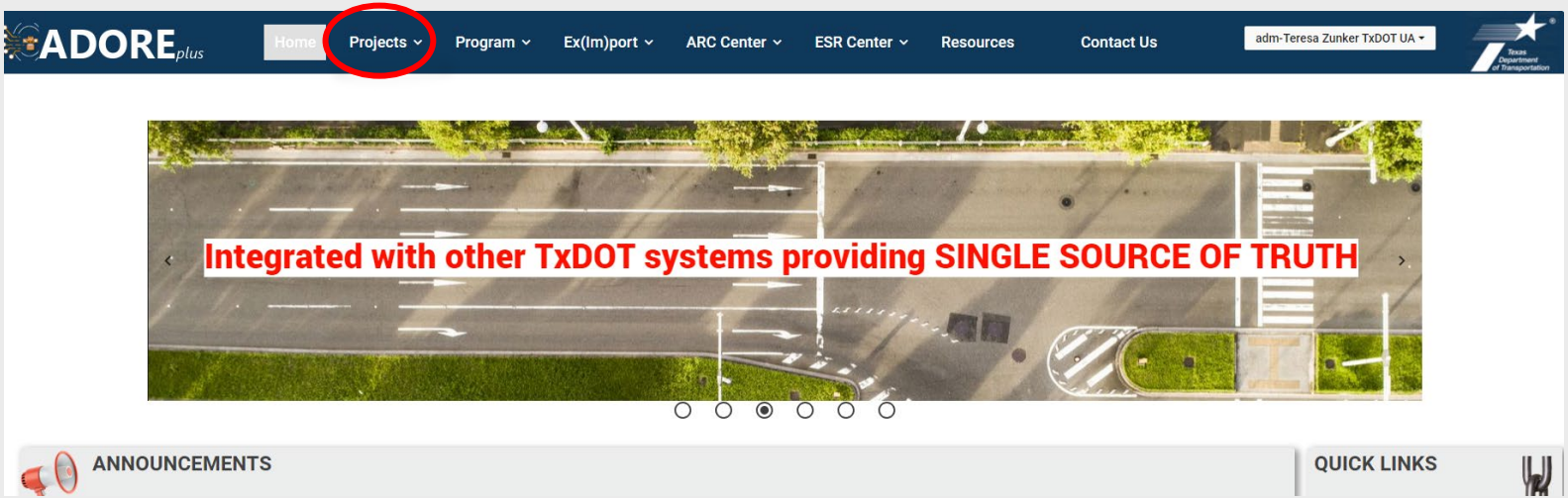
Includes provisions for maintenance during construction & options for maintenance after substantial completion

Items 1-8 of the CMA Specifications are the CMA General Conditions and provide the static terms and conditions for CMA contracts; the CMA Specifications are included in item 9

These and other resources can be found at:

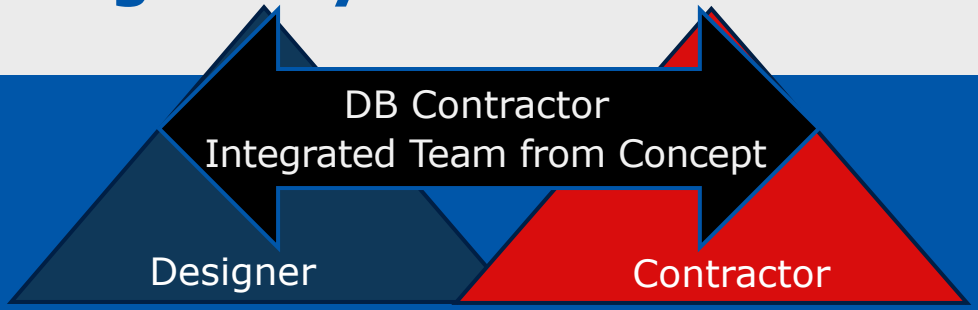
ADOREplus

ADORE*plus* is the official document repository for the Alternate Delivery Program



2 Design-Build Overview

One Contracting Entity



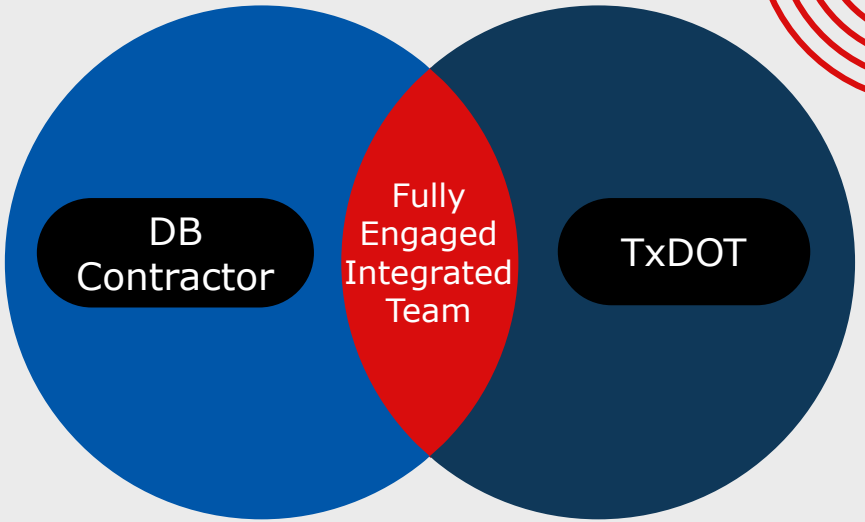
Design-Build project delivery combines project design and construction into a single contract.

- The Designer and Contractor being one joint entity facilitates
  - Innovation through Alternative Technical Concepts
  - Rapid problem solving
  - Value engineering
- DB Contractor is responsible for both design and construction
  - Opportunity for DB Contractor to tailor design to preferred construction methods and resources
  - Design error or inefficiency is the responsibility of DB Contractor to resolve
- TxDOT has less administrative burden with use of one contract

Partnering

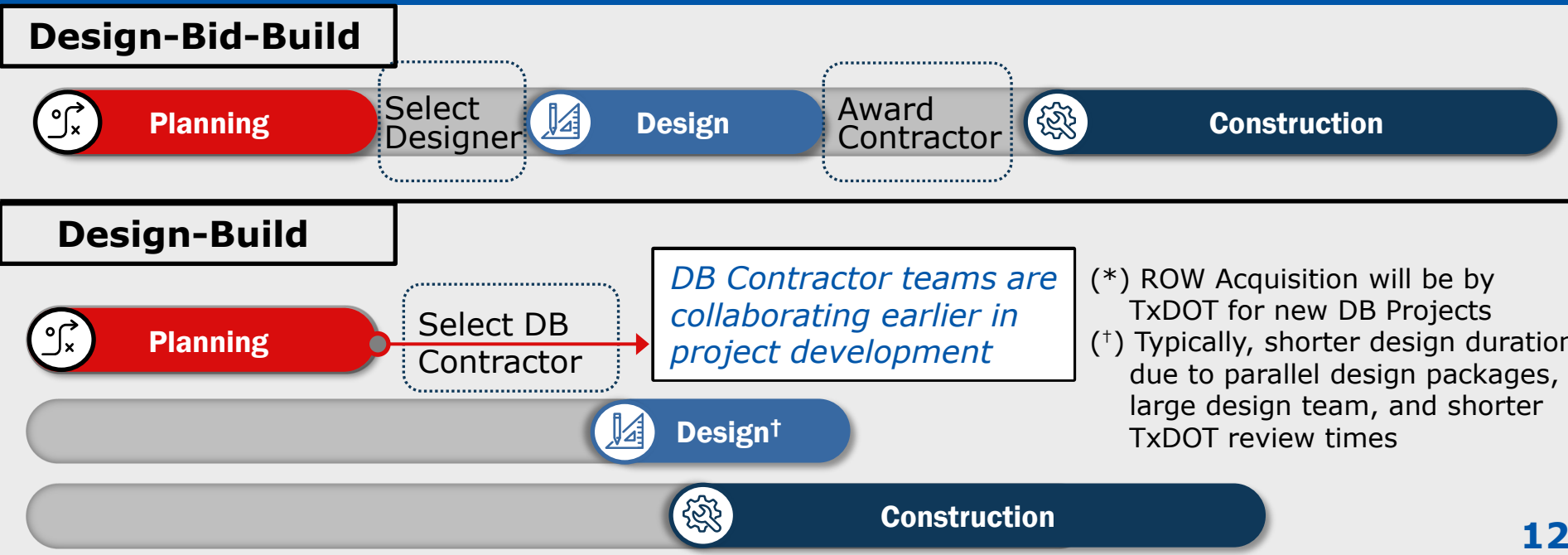
The Design-Build Partnering mindset & culture is essential to success

- Use **Partnering** to solve challenges quickly in a shared risk environment
  - Establish decision-making process and response times
  - Establish responsible parties in the decision-making process
  - Create the foundation for trust to develop between team members
  - Encourage project teams to recognize the goals of all team members



Benefit - Expedited Project Delivery

- **Design-Build Provides Expedited Project Delivery** by overlapping design, construction, ROW acquisition* and utility adjustments



Benefit – Fixed Price Lump Sum Agreement

Design-Bid-Build

- Contract bid with unit prices for line items
- Monthly payment based on completed measured quantities of line/pay items

Design-Build

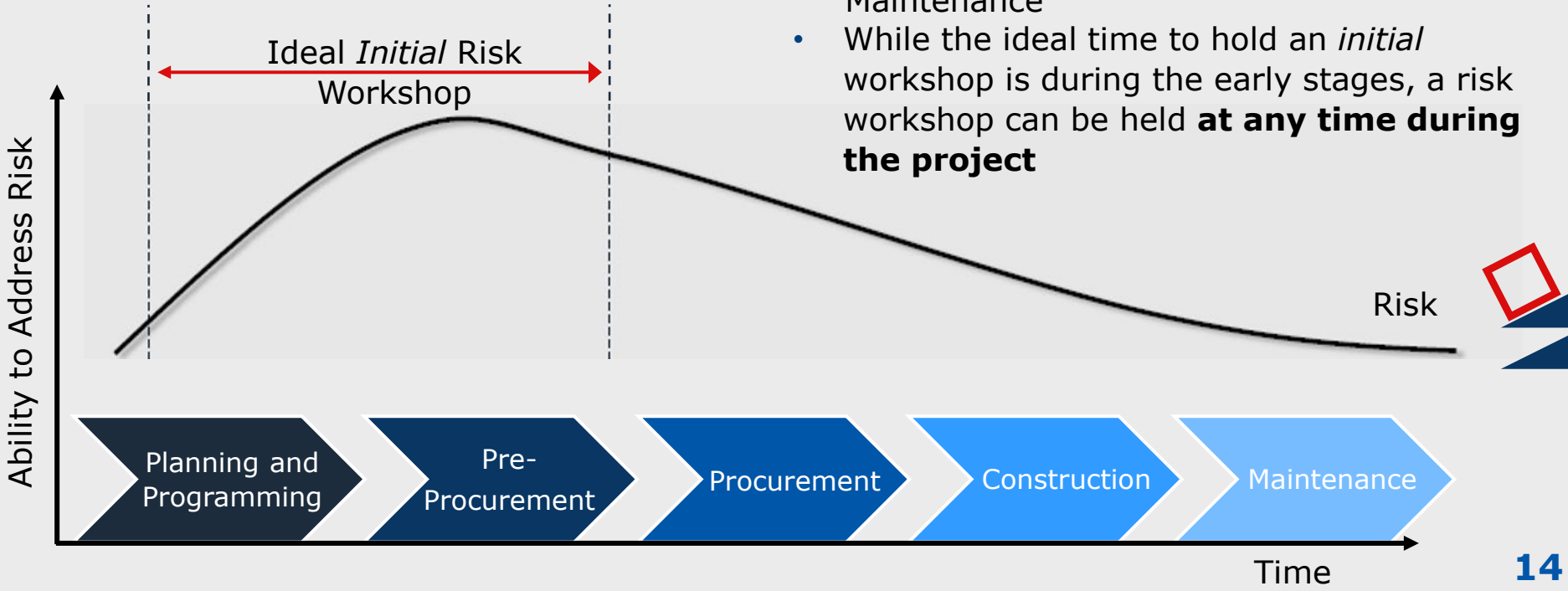
- Contract based on a price for a completed project
- Monthly progress payment based on percent completion
  - Based on a cost loaded CPM* schedule

(*) Critical Path Method

- Improved project cost certainty
- Reduced administrative burden

Risk Workshops

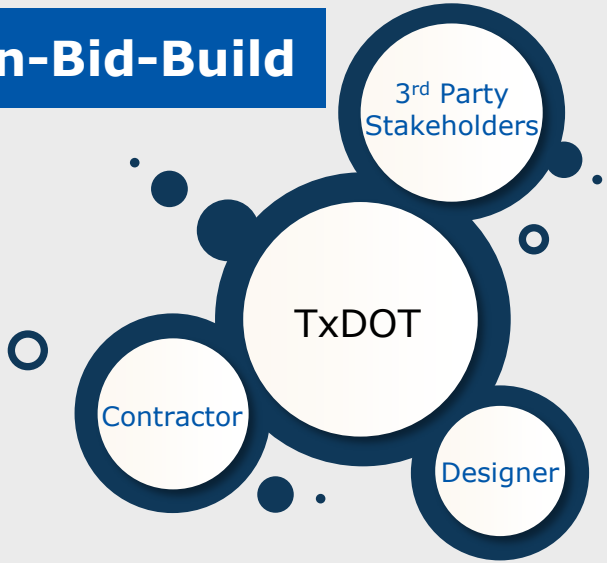
- Identify and document project uncertainties
- Record risks in a log (Risk Register)
- Assess the impacts & decide response
- Track and update the Risk Register
- Transfer the Risk Register and other data as the project progresses from Planning to Maintenance
- While the ideal time to hold an *initial* workshop is during the early stages, a risk workshop can be held **at any time during the project**



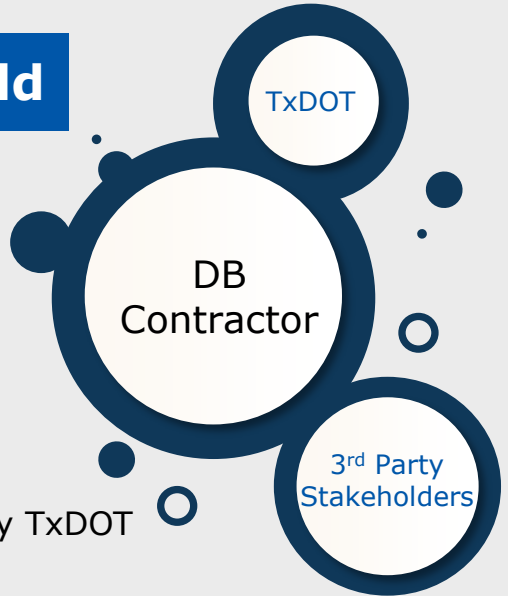
Benefit – DB Contractor has Increased Control over Risk Factors

- DB Contractor has early communication with third-parties and stakeholders and better control over:
  - Permitting
  - Utility Adjustments
  - ROW Acquisition*
- DB Contractor has control over design and early access for site assessment

Design-Bid-Build



Design-Build



(*) ROW Acquisition will be by TxDOT for new DB Projects.

Benefit - Risk Sharing is Contractual

Risk Sharing

Design-Build Agreements include clauses sharing the time and money cost of delays between DB Contractor and TxDOT

In addition to sharing delay costs, indirect costs (markups) are sometimes reduced

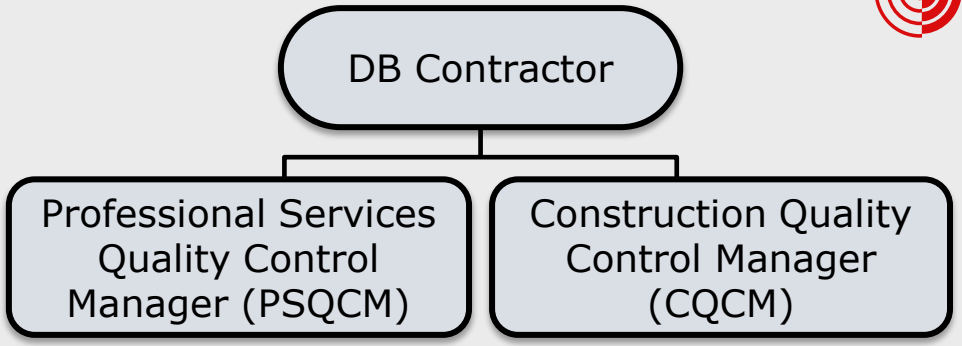
Both DB Contractor and TxDOT are incentivized to mitigate risk

Added value is created for TxDOT with:

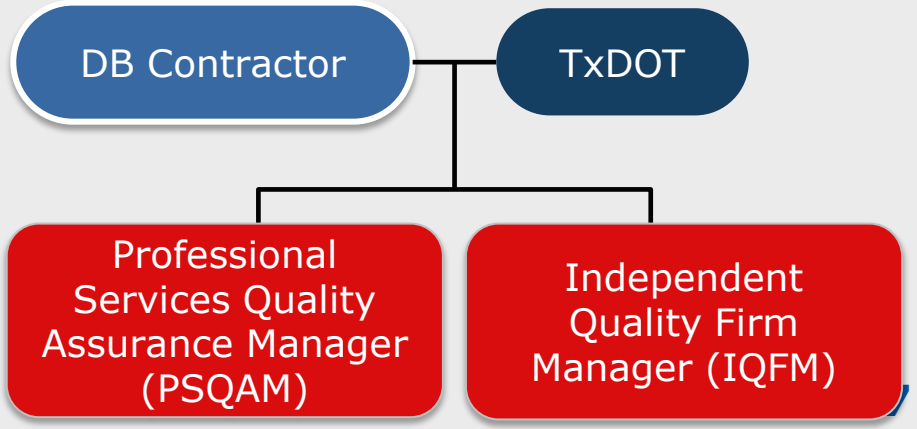
- Improved project cost certainty
- Greater schedule assurance
- Reduced construction disputes

Benefit – QC and QA are by DB Contractor

- Design and Construction Quality Control are performed by DB Contractor and managed by the PSQCM and CQCM
- The PSQCM and CQCM are part of DB Contractor's team



- Independent Design QA is performed by a Professional Services Quality Assurance Firm (PSQAF)
- Construction QA is performed by an Independent Quality Firm (IQF)
- Both independent firms have dual reporting responsibilities



Benefit – Maintenance for Lifecycle Risk

- DB Contractor is well-equipped to construct projects at a reduced cost. However, certain cost savings introduce potential lifecycle risks

- To mitigate this challenge TxDOT may:
  - Add more prescriptive lifecycle design to the technical specifications
  - Contractually obligate DB Contractor for lifecycle risks for an extended period after Final Acceptance of the project

- Design-Build projects include a 5-year Performance Warranty federally-funded within the contract price

OR

- Districts have the option to replace the 5-year Performance Warranty with a TxDOT-funded Capital Maintenance Agreement (CMA) for longer term maintenance up to 15 years

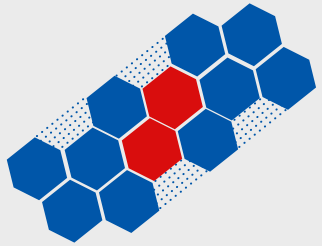
Benefit – Robust DB Contractor Selection Process of Best Value Scoring

Price Score + **Technical Score** = **Total Proposer Score**

Selection based on bid price and technical approach factors

- 70% - 85%
- Design-Build Price
- ATC Adjustments
- Maintenance Price
- Other Factors

- 15% - 30%
- Project Management
- Quality Management
- Design, Construction and Maintenance Plan

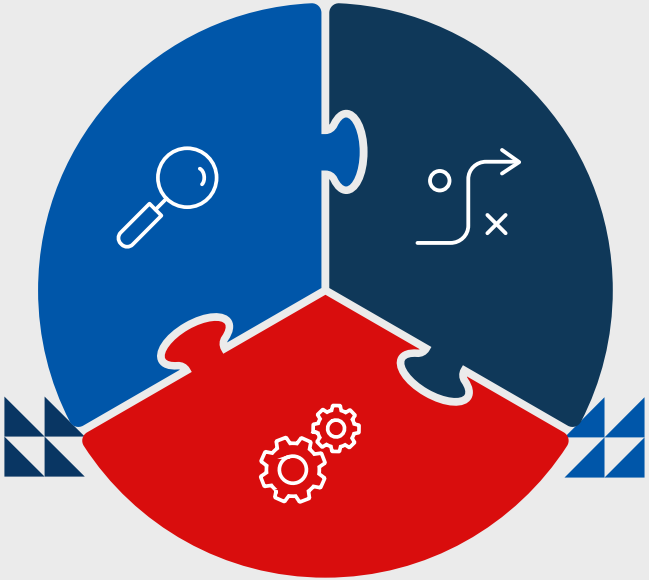


3 Design-Build Initiation

Alternative Delivery

Decision Lens

Select Alternative Delivery projects



Pre- Procurement

Advancing project development to mitigate risks and get ready for procurement.

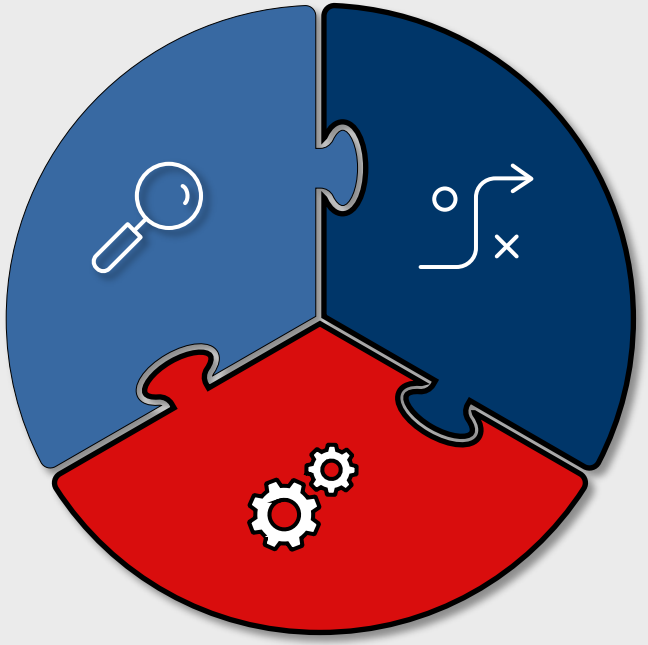
Funding, cost estimate, environmental, schematic, ROW, utilities and railroad

Procurement

RFQ, RFP, selection and contract execution

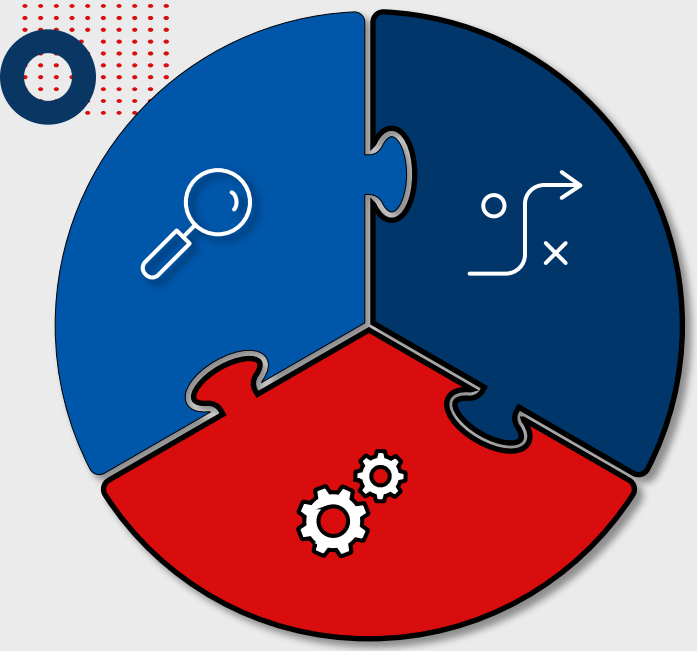
Alternative Delivery Selection

- Project characteristics suited to Design-Build delivery include:



  - Early project delivery adds significant value to project stakeholders
  - Opportunity for innovation
  - Well known site-conditions
  - Well-defined scope
  - Risks are well known and best managed by DB Contractor
  - DB Contractor is better equipped to manage third party issues
  - Project is funded and greater cost certainty is needed
  - Defined design parameters rather than control of design is acceptable

Pre-procurement – Project Readiness



More developed preliminary engineering may lead to a lower bid price but longer time to deliver project

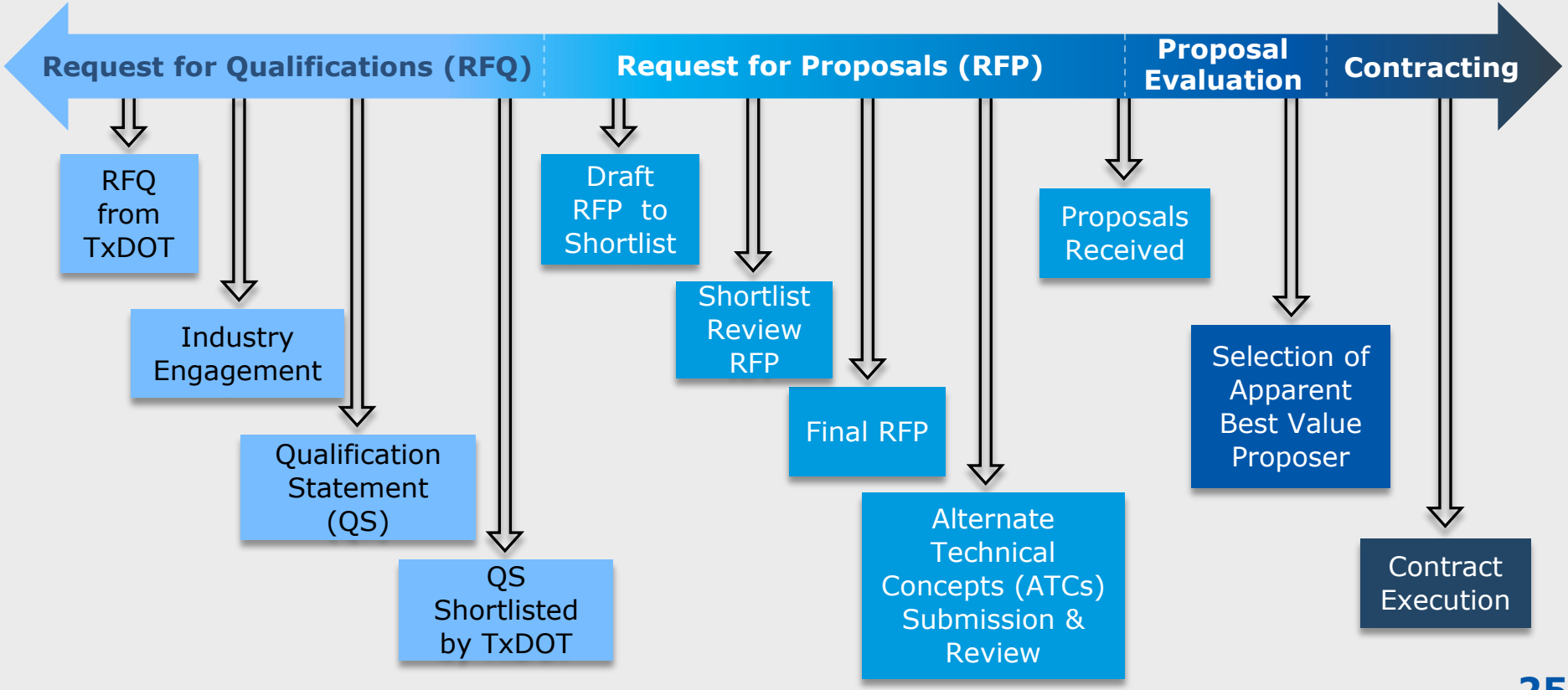
- Preliminary engineering should advance enough for Proposers to appropriately price risk
  - Geotech
  - Survey
  - ROW*
  - Utilities
  - Railroads
  - Environmental

Risk Register Description of Risk Event	Probability	Quality	Schedule	Cost	Severity	Response	Response Category	Risk Owner	Comments
Rework/redesign due to insufficient SUE	3	3	3	3	6	Include contract provisions for shared responsibility/cost	share	TxDOT/DBC	
USACE 408 Permit is delayed	5	3	4	4	8	TxDOT to advance permit as far as possible	share	TxDOT/DBC	
Soft subgrade is encountered	3	3	1	2	2	TxDOT to take borings of suspicious site	mitigate	TxDOT	
Due to poor materials or construction pavement fails in 10 years	2	4	4	4	10	Include long term maintainance contract	transfer	DBC	

(*) ROW acquisition will be by TxDOT for new Design-Build projects

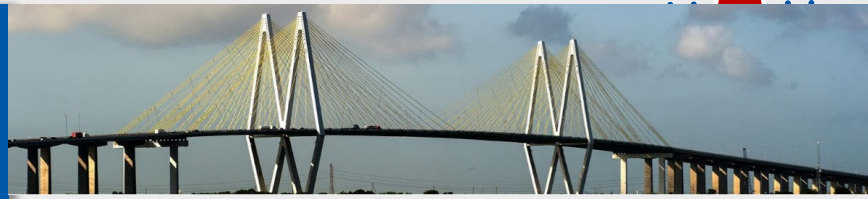
4 Procurement

Procurement Overview



Request for Qualifications (RFQ)

- **TxDOT posts RFQ including**
  - Project Information:
    - Project purpose and need, goals and scope
    - Environmental studies, status, and commitments
    - Survey and geotechnical
    - Cost estimates
    - Coordination & agreements with third parties (utilities, RR, permitting agencies, local governments, FHWA)
  - List of Requirements:
    - Schedule
    - Technical
    - Maintenance
    - Financial



- Industry Engagement includes:
  - TxDOT responds to written questions
  - Addenda may be issued
  - An industry workshop may be held
  - One-on-one meetings may be held

Qualification Statements (QS)

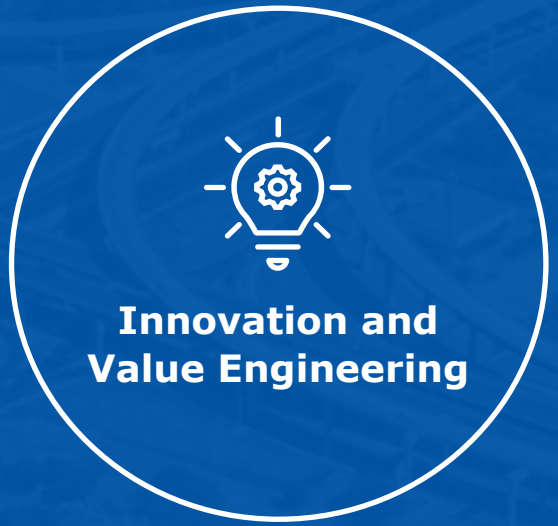
- **Proposers submit Qualification Statements**
  - Qualifications of the firms
  - Financial strength
  - Experience with projects of similar size and complexity
  - Resource availability
  - Safety qualifications
  - DBE Performance Plan
  - Project understanding and approach
  - Key Personnel experience and availability
  - Effective organizational structure
  - History of team working together
  - History of working cooperatively with TxDOT & other owners

- Shortlisted Proposers
  - The QSs are kept confidential and scored by TxDOT. The most qualified candidates are shortlisted and invited to submit proposals.

Request for Proposals (RFP)

- Draft RFP distributed to Shortlisted Proposers
  - Instructions to Proposers (ITP)
  - Updated or additional financial, technical, schedule and maintenance requirements
- Industry Review
  - Proposers may pose written questions about the RFP
  - Answers are not binding unless included in an addendum
  - Confidential One-on-One meetings may be held
  - Draft Alternative Technical Concepts (ATCs) may be submitted confidentially
  - Addenda may be issued

Alternative Technical Concepts (ATCs)



- ATCs suggest modifications to the Design-Build Specifications
- ATCs must not reduce project scope
- ATCs must result in equal or greater project performance and quality
- DB Contractor assumes environmental, permitting, governmental approval and additional ROW risks associated with ATCs
- TxDOT can approve ATCs with contractual conditions
- Draft ATCs during Procurement are a win-win:
  - TxDOT gets an early look at potential design changes
  - Proposers get early feedback on the status of their ATCs

TxDOT Feedback on ATCs

One-on-One Meetings

- A forum for open discussion between Proposers and TxDOT about the project including discussion of potential or draft ATCs and submitted ATCs
- Proposer drives the agenda and discussion, which may be broad or focused
- Meetings are intended to provide Proposers with a better understanding of the RFP

Submitted ATCs

TxDOT responds:

- Acceptable
- Not acceptable
- Conditionally acceptable
- Not eligible

5 DB Contractor Selection

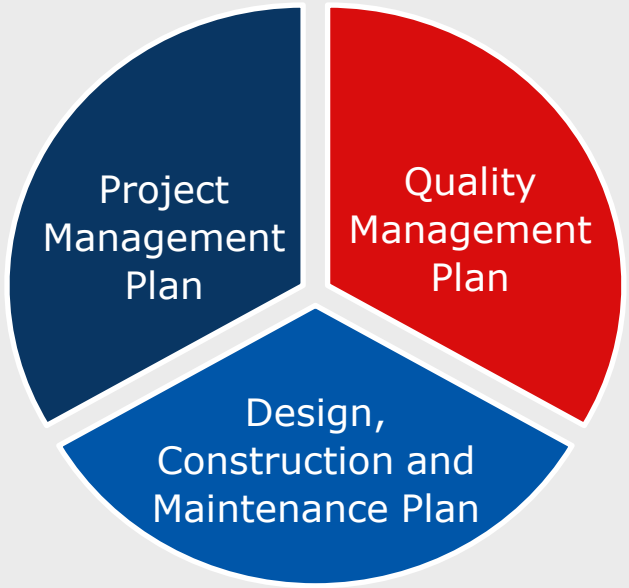
Technical Proposals

Project Management Plan (PMP)

- DB Contractor's managerial approach, strategy, and procedures for the design and construction of the Project

Design, Construction & Maintenance Plan

- Technical approach to engineering and construction methods
- Schedule



Quality Management Plan (QMP)

- DB Contractor's QC, QA and document control procedures
- Complies with the TxDOT QAP (Quality Assurance Program)

Components of the Technical Proposal will become the basis for the project specific portion of the Design-Build Agreement (DBA)

Project Management Plan (PMP)

DB Contractor's managerial approach, strategy, and procedures

- Organization to effectively manage all the work:
  - Organizational roles and responsibilities refined from the QS
  - Describes Key Personnel
  - Establishes workflows
- May include Value-Added Responses - services, aesthetics, ITS/tech, performance or other commitments exceeding the project requirements

- Typically includes these plans:
  - Project Administration
  - Risk Management
  - Utility Management
  - ROW Acquisition
  - Other Affected Third Parties
  - Public Information and Communications
  - Safety and Health
  - Traffic Management
  - Maintenance Management
  - Environmental Protection
  - TxDOT–Design-Build Contractor Communications

Quality Management Plan (QMP)

DB Contractor is responsible for QC/QA and document control

- Complies with TxDOT's *Quality Assurance Program (QAP) for DB Projects*
- Includes specific responsibilities and workflows
- Key staff and independent consultants become contractual
- May include Value-Added Responses - materials, staff, performance or other commitments exceeding project requirements

Professional Services (PSQMP)

- Professional Services Quality Assurance Firm (PSQAF)
- PSQAM performs independent quality assurance reviews
- Design audit and document control

Construction (CQMP)

- Independent Quality Firm (IQF)
- Inspection and material control
- Construction audit and document control

Technical Approach
Part of Design, Construction & Maintenance Plan

- ATCs
- Proposal Schedule (PBS1)
  - Major milestones & work activities
  - Relationships between activities
  - ROW Acquisition*
  - Utility Adjustments
  - Third Party coordination and permitting
  - Completion date
  - Becomes the basis of the contractual Project Baseline Schedules (PBS2 and PBS3)
- Includes traffic management, construction staging/sequencing, bridges, walls, roadway, drainage and maintenance

(*) ROW Acquisition will be by TxDOT for new DB Projects.

Proposal Evaluation

Technical Proposal Score

+ Potential adjustment from interview or other project specific factors
= Total Score

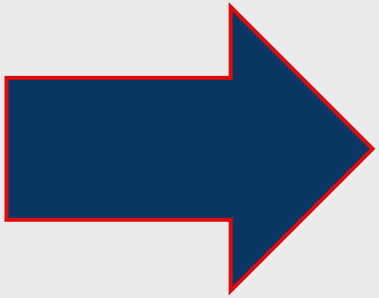
Price Proposal Score

Base Price + ATC Value
+ Maintenance Price Value
= Total Score

Apparent Best Value Proposer

Contract Execution

- Proposal commitments are incorporated into the DBA including ATCs, Value-Added elements, Key Personnel and independent consultants
- ATCs of unsuccessful Proposers and other TxDOT changes may be negotiated into the DBA
- Escrow, bonding and insurance are established
- Stipends can be given to unsuccessful Proposers that submit a responsive Proposal to offset the cost for work during the Proposal phase

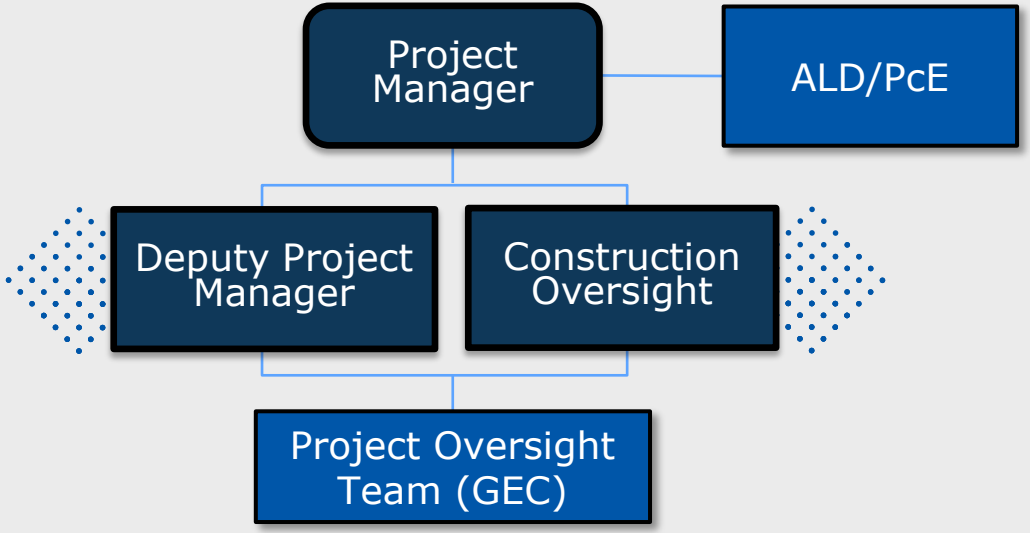


Implementation - Notice to Proceed #1 (NTP1) is issued

6 TxDOT Project Team Organization

TxDOT's Organization for a Design-Build Project

Typical TxDOT District Organization Chart:



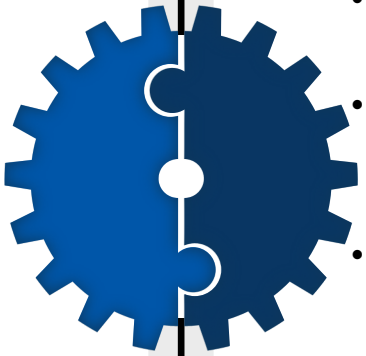
Legend: District Staff | Support Staff

PcE = Procurement Engineer (TxDOT)
GEC = General Engineering Consultant (contracted by TxDOT)

Role of the GEC and ALD

GEC SERVICES:

- Serves as extension-of-staff for the District
- Contract administration, coordination and oversight during implementation
- Environmental, design, and schedule reviews
- Project audit services



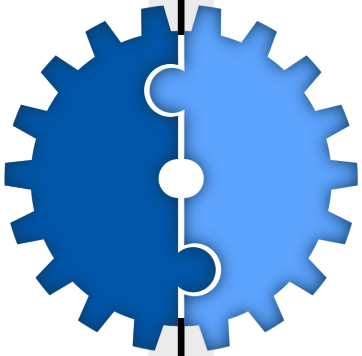
ALD SERVICES:

- Tracking and reporting
- Project liaisons and program audit services
- Preparing ADP guides/ procedures/ training and other support materials for District use
- Review and oversight responsibilities
  - Approvals and reviews per the Signature Authority Matrix (SAM)

Aligning DB Project Team Roles and Responsibilities

DISTRICT/GEC TEAM

- TxDOT District Design-Build Delivery Supervisor
- TxDOT District Project Manager
- GEC Construction Oversight Manager
- GEC Design Oversight
- GEC Design SME
- GEC MOT Oversight
- GEC Maintenance Oversight

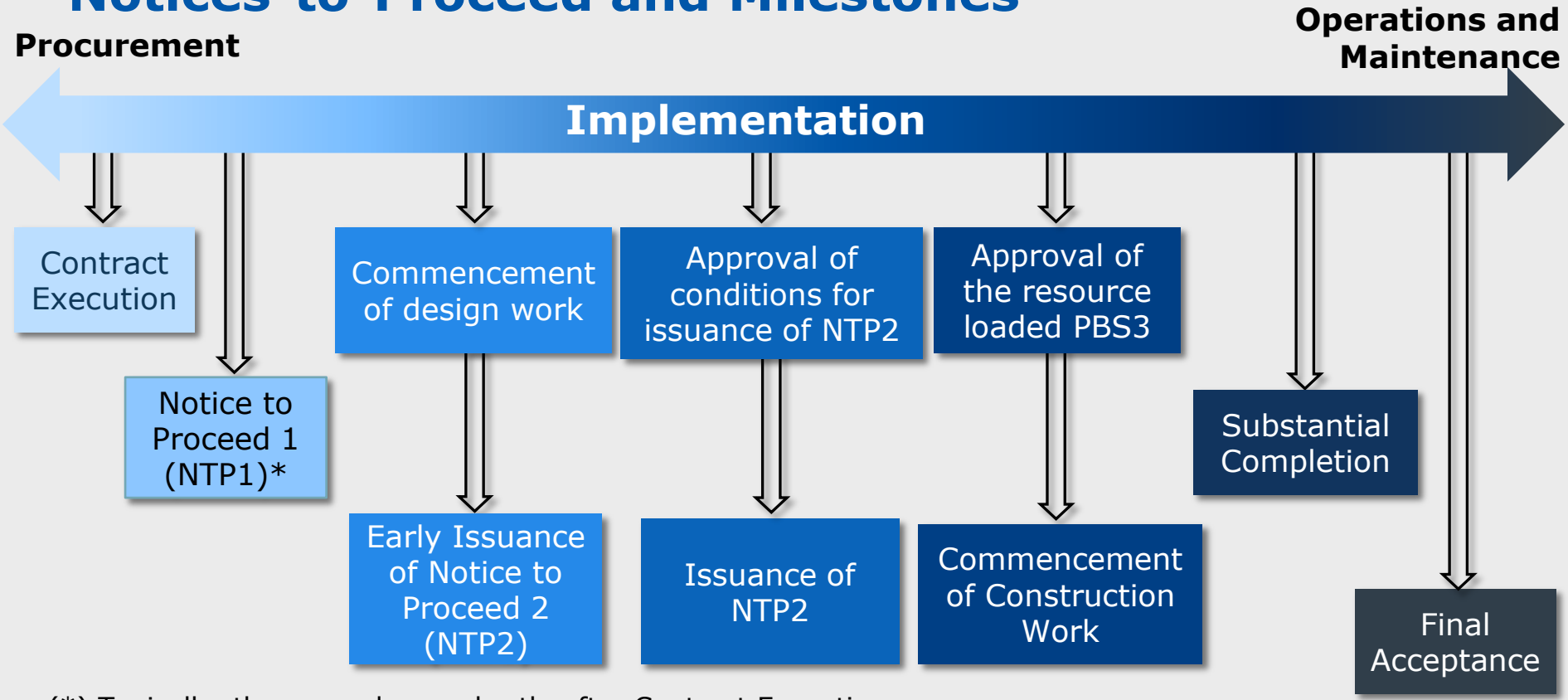


DB CONTRACTOR TEAM

- Project Director
- Project Manager
- Construction Engineer/Manager
- Design Team Leader
- Design Task Leader
- Maintenance of Traffic (MOT) Manager
- Maintenance Manager

7 Implementation

Notices-to-Proceed and Milestones



(*) Typically, the same day or shortly after Contract Execution

Notices to Proceed

Notice to Proceed 1 (NTP1)

- DB Contractor begins project initiation activities before the commencement of design and construction
- A Maximum Payment Amount is placed on initial work until PBS2 is approved by TxDOT and NTP2 is issued
- Approval of these four items is required before NTP2 is issued:
  - **Project Management Plan (PMP)**
  - **Quality Management Plan (QMP)**
  - **Project Baseline Schedule 2 (PBS2)**
  - **Availability of core and field office space**

Notice to Proceed 2 (NTP2)

Project Management Plan (PMP)

Based on the Initial PMP

The PMP is a living document and will be updated as needed

TxDOT will review for compliance with

Contract Reference: DBA GC, Sec. 4.2

- **Remember, the PMP includes these component plans which need TxDOT approval:**
  - Project Administration
  - Public Information and Communications
  - Risk Management
  - Utility Management
  - ROW Acquisition
  - Other Affected Third Parties
  - Safety and Health
  - Traffic Management
  - Maintenance Management
  - Comprehensive Environmental Protection
  - TxDOT – DB Contractor Communications

Quality Management Plan (QMP)

TxDOT will review for compliance with

Based on the Initial QMP

The QMP is a living document and will be updated as needed

★ *Contract Reference: DBA GC, Sec. 4.3, Attachments 4-1 and 4-2, and QAP*

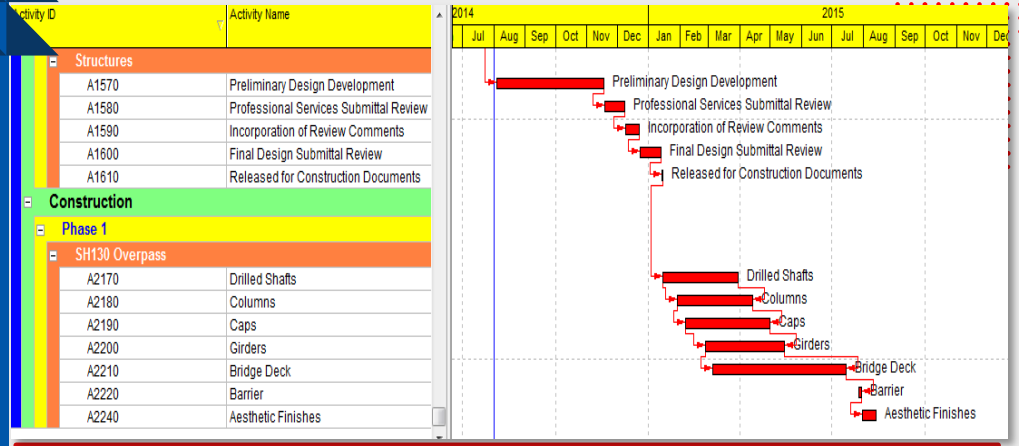
- The Professional Services QMP must be approved before design package submittal
- Includes a Professional Services Quality Control Manager (PSQCM) for the designer's internal Quality Control
- Includes an Independent Quality (IQ) Assurance Firm and Manager (PSQAF & PSQAM) for QC/QA/IQ reviews and audits
- Includes workflows, forms, schedules and checklists

- Includes a Construction Quality Control Manager (CQCM) responsible for DB Contractor QC construction and material acceptance procedures
- Includes an Independent Quality Firm (IQF) responsible for the implementation of the CQMP policies, procedures, QC/IQ reviews, audits and IQ material acceptance
- Includes required trainings and certifications, testing equipment & specifications, workflows, forms, schedules and checklists

Project Baseline Schedule 2 (PBS2)

★ *Contract Reference: DBA GC, Sec. 8.5*

- Similar to Design-Bid-Build the CPM schedule identifies:
  - Activities of all project disciplines
  - Durations of activities
  - Relationships between activities
- Primavera.xer format
- Narrative explaining methodology, software settings, and assumptions
- Weather, calendar, and shift work assumptions, etc.
- Activity durations not to exceed 20 days without approval



Activity ID	Activity Name
Structures	
A1570	Preliminary Design Development
A1580	Professional Services Submittal Review
A1590	Incorporation of Review Comments
A1600	Final Design Submittal Review
A1610	Released for Construction Documents
Construction	
Phase 1	
SH130 Overpass	
A2170	Drilled Shafts
A2180	Columns
A2190	Caps
A2200	Girders
A2210	Bridge Deck
A2220	Barrier
A2240	Aesthetic Finishes

PBS2

- PBS1 is the foundation to prepare PBS2
- Developed to WBS level stated in contract
- Includes *cost loaded Schedule of Values* used to make progress payments
- Resource loading not required

WBS and Schedule of Values (SOV)

- Schedule of Values includes a Work Breakdown Structure (WBS) made of ***distinct identifiable Payment Activities (deliverables)*** derived form the PBS2 Activities
- Progress Payments will be based on % completion of the payment activities identified in the PBS
- Activities broken into value of $1M or less

Bridge Design	$33,342,261.29
Design Package 1 (01, 03A, 06, 07)	$ 2,877,356.00
Structure type study 01	$ 724,568.00
Structure type study 03A	$ 327,855.00
Structure type study 06	$ 925,411.00
Structure type study 07	$ 899,522.00

Activity ID	Activity Name	Budget At Completion
	I-35 NEX Project Baseline Schedule - PBS3 -Schedule Update 11 - March	$1,513,555,711.37
	Project Administration	$379,669,792.98
	Contract Milestones	$0.00
	Administrative Submittals and Permitting	$373,437,215.50
	DB Contractor Segment Milestones	$6,232,577.48
	Utility Agreement & Design	$78,219,126.07
	Utility Coordination	$8,564,615.00
	Utility Conflict	$69,654,511.07
	Design	$101,169,611.64
	General Activities and Field Work	$2,016,948.96
	Project Specifications	$10,504,979.22
	Geotechnical Design & Sitework	$14,489,369.82
	Roadway Design	$14,088,995.01
	Bridge Design	$33,342,261.29
	Traffic Management	$600,000.00
	Enviromental Design	$24,204,929.12
	Landscape and Aesthetic Design	$747,664.53
	Electrical Design	$533,615.92
	ITS	$320,423.88
	Signage and Marking Design	$320,423.88
	Construction	$954,497,180.67
	General	$0.00
	Phase 1	$237,536,819.96
	Phase 1A	$468,219,753.86
	Phase 1B	$145,433,400.23

Project Baseline Schedule 3 (PBS3)

★ *Contract Reference: DBA Exhibit 22*

Cost and Resource Loaded PBS3

- Work/Cost Breakdown Structure (from PBS2)
- Resource and cost loading added to approved PBS2 detailing how the DB Contractor will accomplish the Construction Work
  - Number of crews
  - Crew composition
  - Expected crew production rates
- PBS3 is approved before commencement of Construction Work

SOV Cash Flow & Maximum Payment

Contract Reference:
DBA GC, Sec. 8.5.3.2

- The SOV also includes cumulative cash flow curves based on:
  - Early schedule dates.
  - Late schedule dates.
  - Maximum Payment Schedule.

Months after NTP 1	Cumulative Draw

- Payments are capped by the Maximum Payment Schedule.

EXHIBIT 3 TO ATTACHMENT 9-1

DRAW REQUEST CONTENTS CHECKLIST

Updated actual cumulative cash flow curve plotted along with the three cumulative cash flow curves:

- One based on the early dates.
- One based on the late dates.
- One based on the Maximum Payment Schedule.

Design Submittal Packaging Plan

Developed by DB Contractor

- DB Contractor hosts Workshop to explain and discuss
- Includes 3rd Party submittals and review times
- Early design work may be started after the approval of the Plan after meeting conditions for commencement of design work (see next slide)
- Activities correspond with the Work Breakdown Structure (WBS) for payment
- Early Start of Construction (ESOC) packages are included

Contract Reference:
DBA GC, Attach 4-1, Table 2, QCP-02

DESIGN PACKAGING AND SUBMITTAL PLAN

Wave	Wave Content	Stage	Current Start	Original Duration	Current Finish
1	Aesthetics and Landscape Plan Corridor Structure Type Study and Report General Notes/Specifications Standards Environmental Re-eval for ATC	Preliminary	8-Nov-23	10	19-Nov-23
2	Aesthetics and Landscape Plan Corridor Structure Type Study and Report General Notes/Specifications Standards Environmental Re-eval for ATC	Final	10-Dec-23	10	23-Dec-23
3	Hydraulics Report	Preliminary	17-Jan-24	10	28-Jan-24
4	Roadway Package I-35 STA27+40-STA102+00 Drainage Package I-35 STA27+40-STA102+00 Roadway Removal Package- River Street Bridge Package 1 (01, 03A, 06, 08A) Walls Package 1 Permanent ITS Permanent Lighting Permanent Signs, Signals, Striping	Preliminary	8-Mar-24	10	21-Mar-24
5	MOT Phase 1A, 1, 2 SWPPP Phase 1A, 1, 2 Temporary ITS Phase 1A, 1, 2	Preliminary	21-Mar-24	10	4-Apr-24

Conditions for Commencement of Design Work

Contract Reference: DBA Sec. 8.1.1.5

- DB Contractor may begin Design Work prior to issuance of NTP2 if TxDOT provides confirmation that DB Contractor has satisfied all of the conditions for issuance of NTP2 relating to the Design Work to be performed

- Required Submittals and Approvals:
  - TxDOT approval of the Professional Services Quality Management Plan (PSQMP)
  - Obtain and maintain in effect Performance and Payment Bonds
  - Insurance Certificates
  - Approval of the portion of the Schedule of Values identifying the Design Work

Additional Activities Initiated at NTP1

Conduct surveys and site investigations on TxDOT ROW (geotechnical, hazardous materials, SUE, etc.)

ROW Acquisition

Utility Agreements

Environmental Studies and Re-evaluations

Other affected Third-Party coordination

Select Members of the Dispute Review Panel

ROW Acquisition after NTP 1

TxDOT Responsibility

TxDOT's option which tasks to transfer

- Meeting with displaced occupants
- Preparing relocation assistance packages
- Preparing payment packages
- Initiating and verifying relocation
- Securing vacant improvements

DB Contractor Responsibility

TxDOT is always responsible for:

- Relocation package approval
- Relocation appeal approval
- Eviction case management
- Cost of the relocation assistance reimbursements

(*) ROW acquisition will be by TxDOT for new Design-Build Projects

Utility Adjustment After NTP 1

TxDOT Responsibility

TxDOT's option which tasks to transfer

- Utility Location
- Coordination with utility owners
- Potential conflicts and affected utilities
- Preparing utility adjustment agreements

DB Contractor Responsibility

TxDOT is always responsible for approving utility adjustment agreements

NEPA Environmental Approval Activities

- NEPA studies, coordination and re-evaluations can be included in the DBA and may begin after NTP1, and include:
  - Public Involvement
  - Cultural resources
  - Natural resources.
    - Endangered species
    - Fish & Wildlife
    - Scenic Rivers
  - Noise

Comprehensive Environmental Protection Plan

- DB Contractor is responsible for compliance and monitoring NTP1 through Project Acceptance
  - Environmental Management System (EMS)
  - Environmental Compliance and Mitigation Plan (ECMP)
    - Natural and Cultural Resources.
  - Environmental Protection Training Plan (EPTP)
  - Hazardous Materials Management Plan (HMMP)
  - Communication Plan (CP)
  - Construction Monitoring Plan (CMP)
    - Noise
    - Dust
    - Water quality
  - Recycling Plan (RP)
  - Environmental Team

Third-Party Coordination and Permitting

- USACE/EPA Section 404 and 401 (either nationwide or individual) permits
- Section 402/TPDES stormwater (either general, SWP3, and Notice of Intent) permits
- Section 408 & Section 10
- TCEQ
- Floodplain Coordination / CLOMR
- Coast Guard
- Local Governments
- Border Highway Patrol
- Railroads

Notice to Proceed 2

- NTP2 allows DB Contractor to move forward with the remaining design and construction on the Project

  - Construction on any specific portion of work may not take place until the conditions of commencement for that portion of work are fulfilled

- DB Contractor may request that TxDOT issue NTP2 prior to all of the component parts, plans and documentation of the PMP, QMP and PBS2 are finalized

Project Baseline Schedule 3 (PBS3)

★ *Contract Reference: DBA Exhibit 22*

Cost and Resource Loaded PBS3

- Work/Cost Breakdown Structure (from PBS2)
- Resource and cost loading added to approved PBS2 detailing how DB Contractor will accomplish the Construction Work
  - Number of crews
  - Crew composition
  - Expected crew production rates
- PBS3 is approved before commencement of Construction Work

8 Commencement of Construction Work

Commencement of Construction

Third-Party Approvals

- Other Agency – USACE, Coast Guard, EPA, Flood Plain Administrator
- Railroads

Fee Simple Property Rights

- Other property rights may be acceptable

Administrative Requirements

- Insurance in place
- Guarantee, if any, delivered
- Adopted ethical standards

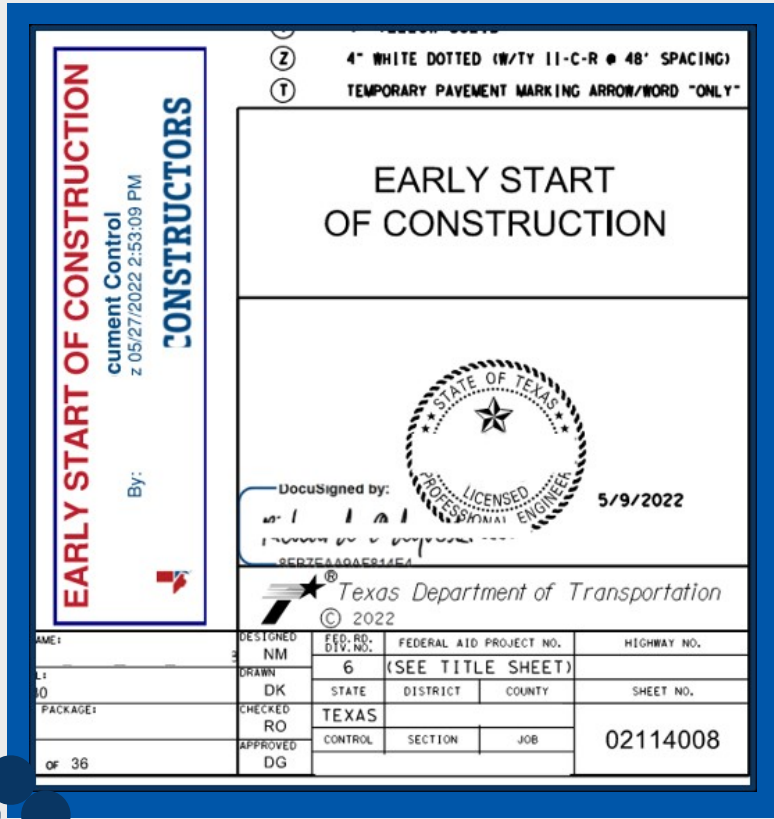
TxDOT Approval

- Final NEPA
- RFC Plans
- NTP2
- PBS3

Commencement of Construction Work

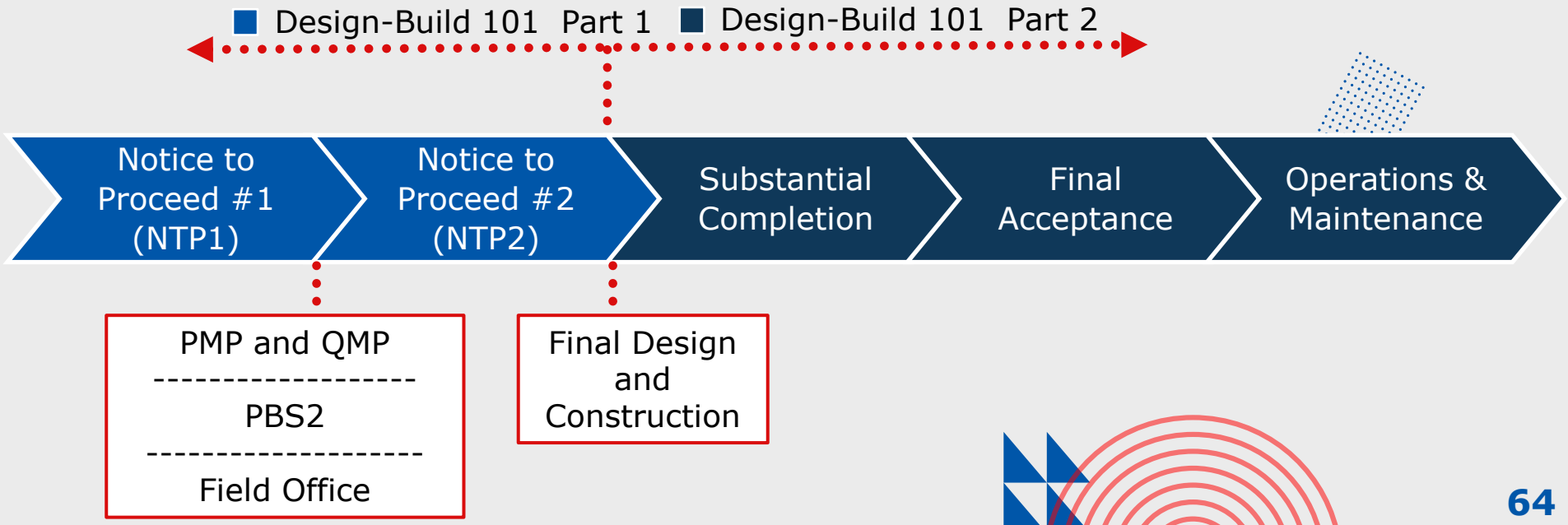
Early Start of Construction (ESOC)

- ESOC is work performed by DB Contractor prior to TxDOT's written statement of no exceptions taken:
  - Rough Grading – Demo/Removal Plans – SWPPP
  - Drainage – Temporary Pavement – Utilities
  - Temp Drainage – ROW Plans
- ESOC is at the sole risk of DB Contractor
- Must be pre-identified and included in Design Submittal Packaging Plan and Project Schedule
- Preliminary and Final Design Packages are required
- TxDOT comments relating to health and safety must be addressed prior to release of the package
- TxDOT concurrence is not provided for ESOC packages



Design-Build 101 – Part 2

- This is the end of Design-Build 101 Part 1
- Design-Build 101 Part 2 is available and covers Final Design and Construction through Final Acceptance & Maintenance



Texas Department of Transportation

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HELP

#EndTheStreakTX

End the streak of daily deaths on Texas roadways.

TxDOT.gov (Keyword: #EndTheStreakTX)

#EndTheStreakTX Toolkit