

AGENDA ITEM MEMO

BOARD MEETING DATE: August 18, 2022

TO: Board Members

THROUGH: Jeff Walker, Executive Administrator
Ashley Harden, General Counsel
Jessica Peña, Deputy Executive Administrator, Water Supply & Infrastructure
T. Clay Schultz Ph.D., Director, Regional Water Project Development

FROM: Jessica Taylor, E.I.T., Customer Service Liaison, Executive Administration

SUBJECT: Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects

ACTION REQUESTED

No action is required of the Board. This is a briefing and discussion on the status of the proposed revisions to Texas Water Development Board's guidance document related to use of Construction Manager-at-Risk (CMAR) and Design-Build (DB) project delivery methods.

BACKGROUND

Historically, the primary delivery method for construction projects financed through the Texas Water Development Board (TWDB) has been Design-Bid-Build. In recent years, the number of projects utilizing alternative delivery methods has grown substantially.

In October 2020, the TWDB published a guidance document for projects utilizing alternative delivery methods. In Fall 2021, staff began re-evaluating the guidance document based on internal staff and external stakeholder feedback. The guidance document has been renamed the Use of Alternative Delivery Methods for TWDB Funded Projects. The document was formerly known as Guidance for Use of CMAR and DB Project Delivery Methods for Communities Financing Projects through the TWDB Financial Assistance Programs.

KEY ISSUES

The proposed revisions to the guidance document are intended to better align the TWDB review process with the general project flow of alternative delivery projects, to the greatest extent possible given current statute and administrative rules. Additionally, the proposed revisions will

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help expedite the staff review time required on CMAR and DB projects. This will allow TWDB to provide an improved process for alternative delivery projects and help entities maintain project schedules.

The guidance document provides details on implementation of a project utilizing TWDB funding using the CMAR or DB delivery method, including procurement requirements as outlined in Texas Government Code Chapter 2269, review requirements in each phase of the project, and availability of funds. However, as noted in the guidance document, it is the recipient's responsibility to ensure compliance with state laws governing contracting and delivery procedures for construction projects and all TWDB programmatic requirements.

On August 11, 2022, TWDB hosted a virtual workgroup with external stakeholders to discuss the proposed revisions to the guidance document. Feedback received during the workgroup, along with all other comments, will be considered and changes will be made to the guidance document when appropriate.

The revised guidance document will be posted on the TWDB website for public comment on August 18, 2022, and written comments will be accepted through September 17, 2022.

SUMMARY

The Executive Administrator will make the revised guidance document available on the TWDB website for public comment on August 18, 2022. Following the public comment period, the Executive Administrator will make changes to the guidance document as appropriate. No action is required of the Board at this time.

Attachments:

1. Public Comment Notice & Summary of Proposed Revisions
2. Draft Use of Alternative Delivery Methods for TWDB Funded Projects
(TWDB-0570)

Public Comment Period on Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects Guidance Document

The Texas Water Development Board is holding a period of public review and comment on the proposed revisions to the Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects guidance document. This document was formerly known as, Guidance for Use of Construction Manager-at-Risk and Design-Build Project Delivery Methods for Owners Financing Projects Through the Texas Water Development Board Financial Assistance Programs.

The document available online includes:

- Summary of substantive changes
- Draft Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects (TWDB-0570)

The period of public review and comment begins on **August 18, 2022** and ends on **September 17, 2022**. Comments on the draft guidance document can be submitted in the following ways:

1. Submit email comments to the following email address:
PUBLIC-COMMENT@twdb.texas.gov
2. Submit written comments to the following postal mail address:
Ms. Jessica Taylor
Customer Service Liaison
Texas Water Development Board
P.O. Box 13231
Austin, TX 78711

Comments will be considered, and changes will be made to the guidance document as appropriate.

Should you have any questions, please feel free to contact Jessica Taylor, Customer Service Liaison, jessica.taylor@twdb.texas.gov, 512-463-7191

Summary of substantive changes proposed in the revised guidance document. Other non-substantive changes are included throughout the guidance document.

1. **Format:** The CMAR and DB sections of the guidance document have been separated into two parts. Part I of the guidance will discuss the requirements for implementation of a project utilizing TWDB funding using the CMAR delivery method, including procurement requirements as outlined in Texas Government Code Chapter 2269, review requirements in each phase of the project, and availability of funds. Part II of the guidance will discuss the requirements from the same sources for implementation of a project utilizing TWDB funding using the DB delivery method.
2. **Project Website or File Sharing Page:** The Owner or Alternative Delivery Firm will be required to create and maintain a project website or file sharing page that the TWDB will be able to access for the life of the project. All project documents submitted to the TWDB, with the corresponding submittal form, will be uploaded to the file page following the Alternative Delivery Document Naming Convention (TWDB-0570 Attachment No. 3). TWDB staff will be able to access and download all files needed for review and add the files to the File of Record.
3. **Front-end Document Template:** The Owner or CMAR Firm will be required to work with TWDB staff to create a Front-End Document Template for the project. The template will include an overall project scope, a draft sub-contract and/or purchase order agreement, the appropriate TWDB Supplemental Contract Conditions, and all required programmatic language and forms. This template will be utilized when the CMAR is preparing Bid Packages and Work Packages. By working with TWDB staff to include all required elements the TWDB will be able to review draft Bid Packages more efficiently.
4. **Bid Package Definition:** In general, a Bid Package contains multiple Work Packages with either similar delivery schedules or related scopes of work. It is the responsibility of the CMAR, working in coordination with the Design Engineer, to split the Design Package(s) into individual Work Packages, and combine the Work Packages into Bid Packages for advertisement. To be eligible for TWDB review and approval a Bid Package must (1) have a total probable cost greater than or equal to \$3,000,000, or (2) consist of four or more Work Packages.
5. **Bid Package and Work Package Review:** The CMAR will be required to upload all award and executed documents for each Work Package in a Bid Package. Items required are outlined in the Alternative Delivery Work Package Submittal Form (TWBD-0400A and TWDB-0570 Attachment No. 2). TWDB staff will review, at a minimum, all related documents for one Work Package in each Bid Package. If inconsistencies with TWDB rule and requirements are found during the review, additional Work Packages will be reviewed. At any time during the construction

phase, the TWDB may review Work Packages in a Bid Package that was not reviewed at the time of the Bid Package Concurrence with Notice to Proceed Review.

6. **CMAR Certificate of Acceptance Procedure:** Prior to release of final retainage on each Bid Package, a Certificate of Acceptance (COA) must be issued. The Owner or CMAR Firm must submit a Bid Package COA request to the TWDB including a letter from the Owner or CMAR Firm certifying that all work in the Bid Package has been completed and a COA Sub-Contractor Checklist (TWDB-0570 Attachment No. 5) with all corresponding documents for each Work Package in the Bid Package. TWDB staff will complete a detailed review of the close out document of, at a minimum, one Work Package in each Bid Package. The TWDB will complete a cursory review of the sub-contract checklist for all other Work Package in a Bid Package.

Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects

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Definitions

In this guidance, the following terms are used¹:

- a. *Alternative (also known as Collaborative Delivery, herein referred to as Alternative Delivery, or AD)*: In accordance with Texas Gov't Code 2269, a method for procuring contracts and delivering a capital project that involve close collaboration among the project owner, designer, and contractor from design through project completion. Design Build and Construction Manager-at-Risk will be discussed in this document.
- b. *Applicant*: The governmental entity seeking funding from the Texas Water Development Board. Generally, the Applicant and the Owner are the same entity.
- c. *Board*: The Texas Water Development Board's three-member governing body.
- d. *Bid Package*: A set of work packages selected by the CMAR to be advertised together.
- e. *Construction Manager-at-Risk (CMAR)*: An AD project-delivery method in which the Owner retains an engineering firm and a construction manager (or General Contractor) under two separate contracts, one for design and the other for construction. The construction manager is responsible for construction performance and commits to delivering the project within a defined schedule and price, either a fixed lump sum or a guaranteed maximum price (GMP). The construction manager provides construction input to the owner and design engineer during the design phase and operates as the general contractor during the construction phase. In this guidance, the CMAR firm may be referred to as "the CMAR".
- f. *Design-Bid-Build (DBB)*: A traditional project-delivery method in which the Owner first procures and contracts with an engineer to prepare detailed design plans and specifications for a project. The Owner then procures and contracts with one or more separate construction companies to construct the project, based on the plans prepared by the Design Engineer. In DBB, the contractor does not have input during the design phase.
- g. *Design-Build (DB)*: An AD project-delivery method in which the Owner enters into a single contract with a Design-Builder to design, permit, construct, test, and commission a capital project.
- h. *Design-Builder*: A partnership, corporation, or other legal entity or team that includes an engineer and a construction contractor qualified to engage in civil work construction in Texas²
- i. *Design Engineer*: On a DBB or CMAR project, this is the consulting engineer (engineering firm) procured by the Owner to provide planning, design, and construction phase engineering services. In this capacity, the Design Engineer is also the Engineer of Record.
- j. *Design Package*: Design-only documents consisting of engineered drawings and technical

¹ Except when noted, definitions are taken from the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Design-Build Council and Design Build-Institute of America (2019)

² Texas Gov't Code § 2269.351(2)

specifications

- k. *Engineer of Record*: A Design Engineer properly licensed in the State of Texas who seals drawings, reports, or documents for a project and is professionally responsible for those drawings, reports, and documents.
- l. *Entity*: In this guidance, the term may be used to refer in general to a distinct and independent organization.
- m. *Guaranteed maximum price (GMP)*: An approach to pricing services in an alternative delivery proposal and contract. The GMP is a price cap on which the Owner is liable for reimbursement costs, including materials, labor, and profit. This pricing approach includes an inherent risk for the delivery team to not exceed the contract maximum price.
- n. *Independent Engineer (IE)*³: Engineer who is independent of the DB firm. This engineer may be in-house staff, or a consultant hired according to applicable procurement laws. The IE acts as the Owner's representative for the procurement process and for the duration of the work.
- o. *Owner*: The Entity in charge of developing the project. Normally the Owner and Applicant are one and the same.
- p. *Owner Advisor (OA)*: A third party individual or firm retained by an owner to provide identified services such as technical, procurement, and management services related to a project. The OA can serve as the owner's representative and advisor during procurement, contracting, and management of the project, but does not make an owner's decisions during the delivery of a project unless authorized to do so.
- q. *Plans and Specification (P&S)*: Set of construction drawings that show details of the design of a project, and standards of performance for construction works, materials, and manufactured products⁴.
- r. *Preconstruction Services*: Services performed by the AD firm prior to the completion of design activities. Preconstruction services typically include tasks such as constructability and value engineering reviews, cost estimating, scheduling, and bidding activities.
- s. *Project Implementation Plan*: Document developed by the Applicant in the planning phase of a project, to serve as a roadmap for successfully completing the project. The Project Implementation Plan defines the owner's capabilities and goals, priorities and drivers, and management oversight for the project, along with its process for selecting a delivery method and procuring an alternative-delivery firm.
- t. *Texas Water Development Board (TWDB)*: The TWDB is the state agency primarily responsible for water planning and administering water financing for the state ([Texas Water Code § 6.011](#)).
- u. *Work Package*: Any major elements of work within a CMAR contract as referred to in [Texas Gov't Code §2269.255](#). In this document, a work package refers to the set of P&S, including the front-end documents (contract documents) for an individual construction-phase subcontract.

³ Texas Gov' Code §2269.355(a)

⁴ 30 Texas Administrative Code Chapter 217.2(54) and 217.2(68)

Resources:

Applicable Rules:

Texas Government Code (Texas Gov't Code), Chapter 2269: [Contracting and Delivery Procedures for Construction Projects](#)

Texas Government Code (Texas Gov't Code), Chapter 2254: [Professional and Consulting Services](#)

Texas Water Code (TWC), Chapter 17: [Water Development Public Funding General Provisions](#)

30 Texas Administrative Code (TAC) Chapter 290, Subchapter D: [Rules and Regulations for Public Water Systems](#)

30 Texas Administrative Code (TAC) Chapter 217: [Design Criteria for Domestic Wastewater Systems](#)

TWDB Program Administrative Rules found in 31 Texas Administrative Code:

Chapter 363: [State Funded Projects \(Water Development Fund \(DFund\), State Water Implementation Fund for Texas \(SWIFT\), Flood Infrastructure Fund \(FIF\), and Economically Distressed Area Program \(EDAP\)](#)

Chapter 371: [Drinking Water State Revolving Fund \(DWSRF\)](#)

Chapter 375: [Clean Water State Revolving Fund \(CWSRF\)](#)

or on the [TWDB Administrative Rules webpage](#).

Guidance Documents:

TWDB guidance documents can be found on the [TWDB Guidance and Forms Library](#).

Related TWDB guidance documents include the following:

CWSRF Loan Program Guidance:	TWDB-0100
SWIFT Program Guidance:	TWDB-0900
FIF Program Guidance:	TWDB-0104
American Iron and Steel (AIS) Guidance:	TWDB-1106
United States Iron and Steel (U.S. I&S) Guidance:	TWDB-1105
Disadvantaged Business Enterprise (DBE) Guidance:	TWDB-0210
Davis Bacon Guidance:	DB-0156
Guidance on Procuring Architects and Engineers:	TWDB-1108
TWDB Supplemental Contract Conditions (SCC):	
• CWSRF & DWSRF - Equivalency Projects:	TWDB-0550
• CWSRF and DWSRF - Non-Equivalency Projects:	TWDB-0551
• State Funded Projects:	TWDB-0552

Other Resources:

Note: These resources are for reference to provide insight on industry standards. They have not been approved by and do not necessarily represent the position of the TWDB.

Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association, originally published under the Water Design-Build Council, and Design-Build Institute of America, 2019. A copy of the handbook may be obtained by visiting the [Water Collaborative Delivery Association website](#) (formerly the Water Design-Build Council)

Water/Wastewater Sector, Design-Build Done Right™, Design-Build Practices, 2015 Publication from the Design-Build Institute of America

Alternative Delivery (AD) Guidance

Background

This document has been prepared, based on industry standards, to help guide the Owners and their consultants in understanding how TWDB funding can be used to finance an AD project. Alternative Delivery eligibility, steps necessary to secure funding from the TWDB, requirements for contract approvals, and the release of funds processes will be discussed. Owners must ensure that they comply with all the requirements of Texas Government Code (Texas Gov't Code) Chapter 2269 with regards to hiring and implementing any alternative delivery project as well as state and federal statutes and rules governing TWDB financing programs.

Not every project can (or will) benefit from using an AD method. The Owner must consider the benefits, limitations, cost, schedule, funding program requirements, and other aspects of the project when deciding whether the project would benefit from using an AD approach, especially when using TWDB's CWSRF or DWSRF programs, which include the federal crosscutter requirements.

Enabling Legislation in Texas

In 2007, the 80th Texas Legislature amended the Texas Gov't Code to allow the use of alternative project delivery methods for the construction of water and wastewater projects. The 82nd Legislature placed this material in Texas Gov't Code Chapter 2267. The 83rd Legislature removed these provisions from Chapter 2267 and placed them in Chapter 2269 of the Texas Gov't Code.

- Construction Manager-at-Risk (CMAR) procedures are described in Texas Gov't Code Chapter 2269, Subchapter F.
- Design-Build (DB) procedures are described in Texas Gov't Code Chapter 2269, Subchapter H.

TWDB Programs & Alternative Delivery Eligibility

Regardless of the project delivery method employed, all Applicants must meet general TWDB program funding requirements and requirements unique to each funding program. It is important that the Applicant understand and comply with these requirements and provide documentation requested during the application, planning, design, construction, and post-construction phases of the project. In addition, once a funding request is approved by the Board, release of funds for project-specific tasks is governed by the applicable Texas Administrative Code (TAC) rules, as well as by TWDB operating procedures and best business practices. The TWDB Program Administrative Rules applicable to the various TWDB funding programs can be found in 31 Texas Administrative Code Chapters [363](#), [371](#), and [375](#) or on the [TWDB Administrative Rules webpage](#).

NOTE: The following recent SRF Programmatic Eligibility Clarifications were provided by the Environmental Protection Agency (EPA) (Headquarters), and are reflected through this guidance:

- Design-Build projects are eligible for CWSRF – Equivalency funding when the construction cost is predominant (i.e., 51 percent or more of the total project cost)
- Procurement standards in 2 CFR Part 200 do not apply to CWSRF or DWSRF loans

About this Guidance

This guidance is divided into two parts:

Part I: Construction Manager-at-Risk Method – This part discusses the CMAR method of Alternative Delivery authorized in Texas Gov't Code Chapter 2269. Details related to procurement of the CMAR firm, TWDB project implementation processes, availability of funds, and project close out are included.

Part II: Design-Build Method – This part discusses the DB method of Alternative Delivery authorized in Texas Gov't Code Chapter 2269. Details related to procurement of the DB firm, TWDB project implementation processes, availability of funds, and project close out are included.

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Part I – Construction Manager-at-Risk Method

Requirements when using the CMAR Delivery Method

CMAR Delivery Method

Construction Manager-at-Risk is a delivery method by which an Owner contracts with an architect or engineer for design and construction phase services, and contracts separately with a construction manager-at-risk (CMAR) to serve as the general contractor and to provide consultation during the design and construction, rehabilitation, alteration, or repair of a facility. The CMAR is responsible for procuring equipment, subcontracts, and delivering the project within an agreed upon schedule and price. The work is procured via work packages and the CMAR must bid each work package, other than the minor work that may be included in the general conditions and performed by the CMAR.

CMAR Phases:

- The Owner procures the design engineer and the CMAR firm separately in accordance with applicable procurement laws and program funding requirements. A guaranteed maximum price (GMP) for the CMAR contract may be set at this time, or the CMAR contract may be amended at a pre-determined stage of the project to set a GMP.
- The Owner's selection of a CMAR firm, as well as process deadlines, are outlined in [Texas Gov't Code § 2269.253](#) and [§ 2269.254](#). These statutes allow for procurement of the CMAR firm in either a one-step process (via a request for proposals (RFP)) or a two-step process (via a request for qualifications (RFQ) followed by an RFP). The Owner shall state the selection criteria in the RFQ and/or RFP.
 - In the two-step process, per the above referenced Code, the Owner is not allowed to request fees or prices during the RFQ phase. In addition, the Owner has 45 days from the day on which the final proposals are opened, to evaluate and rank the submitted proposals.
- During the design phase, the CMAR firm becomes actively involved, providing construction-related advice on preconstruction aspects of the project such as site layout, constructability, early cost and schedule factors, and preparation of bid packages.
- The CMAR will advertise bid packages, review the bids, and recommend award of each work package. The cost of the CMAR contract will be the cumulative award for all work packages, CMAR fees, and profit, not to exceed the GMP.
- During the construction phase, the CMAR firm assumes the role of general contractor, and is responsible for full construction and commissioning.

A. Project Pre-Planning when Seeking TWDB Funding

An Applicant, which is also usually the Owner, should keep the following steps in mind when seeking funding from the TWDB for the development of a project using the CMAR method.

1. *Project Pre-Planning*

The Applicant should begin to plan its project and evaluate the appropriate delivery method to use based on criteria such as project complexity, size, cost, schedule, and risk. The Owner should also begin to evaluate potential financing options that would be compatible with the delivery method chosen.

TWDB staff strongly recommends that the project Owner consider engaging an in-house Project Management Team, consisting of representatives from engineering, operations and maintenance, finance, procurement or contracts, legal, and communications, to assist in the project definition, procurement of consultants and contractors, and implementation aspects of the CMAR method.

See Chapter One of the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association (originally published under the Water Design-Build Council), and Design Build-Institute of America (2019) for additional information on the owner's project implementation team membership and roles, as well as an example Organization Positions and Responsibilities table.

The TWDB recommends the Owner request an informational meeting with TWDB Regional staff at this phase to discuss potential funding options and TWDB funding requirements.

2. *Project Pre-Application Meeting with TWDB staff to Discuss CMAR*

The Owner must have a pre-application meeting with the TWDB as early as possible to discuss the proposed project and the alternative delivery method being considered. For CWSRF, DWSRF, SWIFT, and FIF projects, this meeting may be scheduled after the Applicant receives an invitation to apply.

3. *Risks and Responsibilities*

As part of the *Project Implementation Plan*, the TWDB recommends that the Owner develop a detailed risk and responsibilities matrix, to be included in the procurement documents. As described in the *Water and Wastewater Design-Build Handbook*⁵, a risk and responsibilities matrix "identifies foreseeable risks, the probability that each risk will occur, the potential impact of each risk, the party responsible for the risk, and how each risk will be managed if realized." Once the CMAR firm is selected, the matrix becomes fundamental in the preparation and negotiation of the agreement.

Additionally, the TWDB recommends that a preliminary risk register be developed for the project. A risk register catalogs risks and identifies the party responsible for mitigating them. More on the benefits of a risk and responsibilities matrix and risk register concepts, as well as examples of a risks and responsibilities matrix and a risk register, can also be found in the *Water and Wastewater Design Build Handbook* (See Table 3.2 – Examples of Allocated Risks and Responsibilities in Collaborative-Delivery Approaches, and Figure 3.2 – Sample Project Risk Register.)

4. *Selection of a CMAR firm:*

The Owner should select the CMAR firm in compliance with all the requirements of [Texas Gov't Code Chapter 2269](#). All contracts to be funded by the TWDB shall include the applicable TWDB Supplemental Contract Conditions (SCC) in their entirety (or as modified with agreement and prior written approval of the TWDB) and all applicable TWDB programmatic forms (see "*Resources*" section above, for links to these resources).

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the CMAR firm must be approved **prior** to contract

⁵ Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association, originally published under the Water Design-Build Council, and Design-Build Institute of America (2019)

execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and CMAR firm can be found in Attachment No. 3.

CMAR contract – The TWDB recommends that the CMAR contract include:

- a clearly defined scope of work;
- clearly defined responsibilities and relationship between the design engineer and the CMAR;
- documentation to address work that may be self-performed by the CMAR, in accordance with [Texas Gov't Code § 2269.255](#) (see Part I.B.5.f – CMAR Bidding on Bid Packages);
- clearly define elements of work that may be considered “minor work” (see Part I.B.3) along with the defined minor work criteria;
- clearly identified proposed early work to be procured (see Part I.B.5g – Early Work Procurement) as applicable;
- clearly require signed and sealed Design Packages be assembled for all proposed early work procurements and Bid Packages;
- documentation to address responsibilities for testing, and inspection, and quality control during construction;
- documentation to address responsibilities for completing buildability and constructability review and certification; and,
- appropriate TWDB SCC and forms as discussed in Part II.C of this guidance.

B. TWDB Project Implementation Processes using CMAR

Below are general TWDB project guidelines when using the CMAR delivery method. The Owner should discuss the guidelines below, with the Regional Water Project Development (RWPD) Team assigned to its project and clarify any questions early in the process.

The Owner is referred to the Design Package Submittal Form (Attachment 1 – TWDB-300A) and the Alternative Delivery Work Package Award Submittal Form (Attachment 2 – [TWDB-0400A](#)) for an overview of the requirements applicable to each funding program. **All submittals must be in a high quality, fully searchable, PDF format, contain the correct TWDB project identifier, be bookmarked, or indexed, and address all required submittal items. Submittals not meeting these requirements will not be accepted for review.**

1. Application Phase

- a. A pre-application meeting must be held prior to submittal of an application for funding the proposed CMAR project.
- b. The Owner/Applicant submits a complete application. See [TWDB application form](#) or the online application (OLA).
- c. If the project's planning phase is complete and the Applicant is requesting funds for the subsequent design and construction phases, then an Engineering Feasibility Report (EFR) and a [Federal Environmental Review Form](#) (for Federal Programs) or an [Environmental Data Form](#) (for State Programs) will be required as part of the application.
- d. The Owner will provide a formal letter requesting the use of the CMAR method and clarifying the benefits that CMAR will provide over the traditional DBB method. The applicant shall ensure that the following are addressed in their request letter:
 - document the benefits of using an AD method in accordance with requirements

- of [Texas Gov't Code § 2269.056](#);
- certify the Applicant's engineer, or an entity related to the Applicant's engineer, will not serve, alone or in combination with another person, as the CMAR for the project ([Texas Gov't Code § 2269.252\(b\)](#)); and,
- certify the Applicant's engineer will be selected based on demonstrated competence and qualifications as provided by [Texas Occupations Code § 1001 \(Texas Gov't Code § 2269.057\(b\)\)](#).

2. Design Engineer Firm Selection

- a. Contracts for engineering services must be submitted for review prior to execution. Note that this review by the TWDB is not to determine the legal validity of the contract, but to evaluate scope of work and eligibility for funding through the TWDB funding programs.
- b. For DWSRF and CWSRF Equivalency funding, all professional services must follow the DBE requirements set forth in [TWDB-0210](#). All DBE forms must be submitted for review and approval, prior to execution of the contract to ensure eligibility of funding.
- c. For CWSRF Equivalency funding, the Applicant must certify that the consulting engineer services were procured in accordance with the requirements of the Federal Water Pollution Control Act as interpreted by the Environmental Protection Agency (See [TWDB-1108](#))
- d. The Owner shall provide a certification regarding the Applicant's Design Engineer and its representation to comply with [Texas Gov't Code § 2269.252\(b\) and \(c\)](#).

3. CMAR Firm Selection, Documentation, and Contract Review

The Owner's contract with the CMAR firm, as well as the advertisement for proposals, must include all program specific language and bonding requirements as found in the TWDB SCC:

CWSRF & DWSRF Equivalency projects ([TWDB-0550](#))
CWSRF & DWSRF Non-Equivalency projects ([TWDB-0551](#))
State loan projects ([TWDB-0552](#))

Please note, the TWDB SCC should be included in the contract documents and will not be accepted if added as an appendix.

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the CMAR firm must be approved prior to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and CMAR firm can be found in Attachment 3.

a. Draft CMAR Contract Review:

- The Owner shall provide documentation to demonstrate compliance with [Texas Gov't Code § 2269.253](#) and [§ 2269.254](#). Documentation shall include:
 - A copy of the RFP for a one-step process or RFP and RFQ for a two-step process ([Texas Gov't Code § 2269.253](#)), and
 - If DWSRF or CWSRF Equivalency funding, the applicable set of DBE forms (see [TWDB-0210](#)) and appropriate supporting documentation.
- The Owner shall submit a copy of the draft Owner/CMAR contract for review for compliance with TWDB funding program requirements. The submittals shall be in a high quality, fully searchable PDF format.

- All TWDB programmatic requirements as provided in the appropriate version of the TWDB SCC ([TWDB-0550](#), [0551](#), or [0552](#)) must be included in the CMAR contract. Any modifications to the SCC must receive prior written approval by the TWDB project manager.
 - The TWDB recommends that the Owner consider adding a discussion to the CMAR contract regarding the factors identified below. These are recommended as Best Management Practice (BMP) additions to the CMAR contract, intended to help prevent or reduce problems and conflicts that may arise due to ambiguity between roles and responsibilities of the CMAR and the Design Engineer, as well as to avoid confusion regarding when the CMAR may self-perform or perform minor work.
 - Clearly define the responsibilities and relationships between the Design Engineer and the CMAR. This is especially important if a Risks and Responsibilities Matrix (or similar type of documents) has not been prepared;
 - If known at the time of preparation of the contract, address work to be self-performed by the CMAR. See requirements for this under Section II.D.1.e below;
 - Address testing and inspection during construction; and,
 - See also Part I.A.4 of this guidance.
 - Any proposed minor work must be clearly defined and included in the general conditions of the contract ([Texas Gov't Code § 2269.001\(4\)](#) and [§ 2269.255 \(a\)](#)). The Owner and its legal counsel are responsible for defining what type of work constitutes “minor work”. The Owner and its legal counsel shall provide a certification that the proposed method of procurement meets the requirements of the law applicable to the Owner.
 - TWDB will provide a comment letter, if necessary, to communicate any concerns with the draft contract.
 - Once all concerns have been properly addressed, the TWDB will concur in the award of the contract.

b. Executed CMAR Contract Acceptance:

- The Owner will execute the CMAR contract and submit a copy of the executed contract to the TWDB.
 - Note: The CMAR will provide the payment and performance bonds in an amount not less than 100-percent of the contract price (GMP or fixed price amount) and meet the requirement of [Texas Water Code §17.183\(2\)\(A\) and \(B\)](#). If a price has not been agreed upon, the CMAR may provide a bid bond, or other financial security acceptable to the Owner, in accordance with [Texas Gov't Code §2269.258](#).
- The TWDB will provide a comment letter, if necessary, to communicate any concerns with the executed contract.
- Once all comments have been addressed, the TWDB will accept the CMAR contract. For details on when work elements are eligible for funding see Part I.C Availability of Funds for CMAR Projects.

4. Planning and Acquisition for CMAR Projects

This guidance discusses only the design and construction phases of a CMAR project. Projects

using TWDB funding for planning activities, such as land acquisition and environmental clearance, the activities must be completed prior to the approval of design and construction documents, and prior to the approval of release of funds for design and construction activities.

Further, if land acquisition is a project component, the environmental review related to the land acquisition must be completed and an environmental determination issued by the TWDB, prior to the release of funds for land acquisition.

Planning phase submittals include (1) an Environmental Document, and (2) an Engineering Feasibility Report (EFR). Guidance for these submittals is discussed in the following documents, which can be found at the TWDB website:

- Engineering Feasibility Report Guidance:
 - [Water Projects](#)
 - [Wastewater Projects](#)
 - [Flood Projects](#)
- [Federal Environmental Review \(EID\)](#)
- [Environmental Data Form for State Programs](#)

The Planning phase is complete upon issuance of an Environmental Determination and approval of the EFR.

5. Preparation of Design and Bid Packages

This section discusses the process to submit design and bid packages for review and approval. Prior to submitting documents for review, please ensure that the following items are addressed:

- a. The Owner or CMAR Firm must create a website or file sharing page where all project documents will be stored and accessible to the TWDB for the life of the loan. Documents must be named following the Naming Convention found in Attachment No. 4.
- b. [Texas Water Code § 17.183\(b\)](#) requires plans and specifications submitted to the Board in connection with an application for financial assistance must include a seal by a licensed engineer affirming that the plans and specifications are consistent with and conform to current industry design and construction standards.
- c. The applicable Document Submittal Checklist is completed including page references to all review items.
 - Design Package Submittal Form (TWDB-0300A)
 - Alternative Delivery Work Package Award Submittal Form ([TWDB-0400A](#))
- d. Bookmark or index all submittals to reduce review time and potential comments. Submittals that are not bookmarked will not be accepted.
- e. Submittals shall be in a high quality, fully searchable PDF format. Submittals that are not searchable will not be accepted.
- f. The Entity should certify that they have performed Quality Assurance and Quality Control (QA/QC) review on the documents submitted to TWDB for review or approval. The entities certification shall ensure that things such as:
 - The correct TWDB project identifier is used on all documents.

- Documents are properly signed and notarized, as applicable.
- All project elements the Owner is seeking TWDB funding for must receive TWDB approval prior to construction.
- Submittal is complete (bookmarked, searchable, no missing pages or information), concise, and accurate
- Avoid duplication of attachments, guidance, or forms within a document.

CMAR projects can take on many different structures. When planning the structure of Design Packages, Bid Packages, and Work Packages please discuss with the TWDB project manager as early as possible. As shown in Figure 1 below, the project can include one or multiple Design Packages. Each Design Package will need to be reviewed for compliance with TCEQ Design Criteria, as applicable. [Texas Water Code § 17.183\(b\)](#) requires plans and specifications submitted to the Board in connection with an application for financial assistance must include a seal by a licensed engineer affirming that the plans and specifications are consistent with and conform to current industry design and construction standards.

It is the responsibility of the CMAR, working in coordination with the Design Engineer, to split the Design Package into individual Work Packages, and combine the Work Packages into Bid Packages for advertisement. In general, a Bid Package contains multiple Work Packages with either similar delivery schedules or related scopes of work. The CMAR contract may be amended to include a partial GMP for each Bid Package.

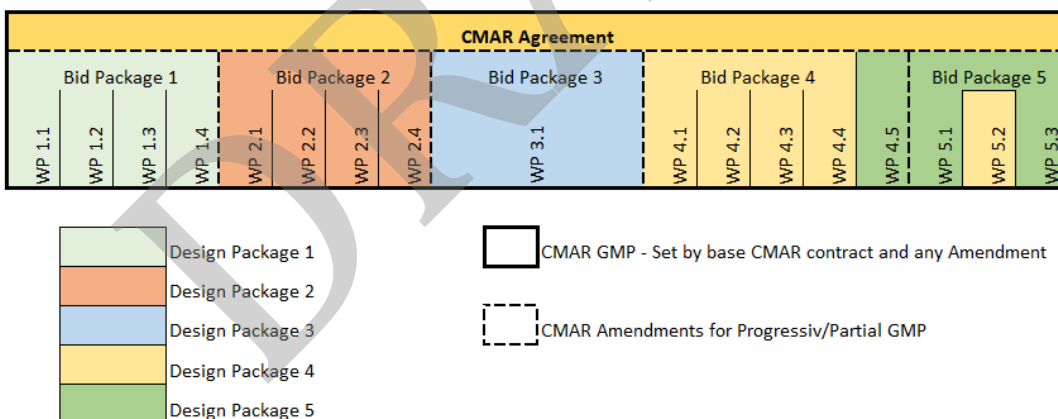


Figure 1: CMAR Project Structure

a. Design Package Review:

- The Owner or CMAR firm will submit for review a complete Design Package, signed and sealed by a licensed professional engineering registered in the State of Texas. A Design Package must address the following items:
 - Include a completed copy of the **Design Package Submittal Form (Attachment 1 – TWDB-0300A)**. If you have questions, please discuss with the TWDB project manager.
 - Include a copy of TCEQ’s approval letter of the complete set of P&S, if applicable.

- **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ's technical review and approval of the complete set of P&S.
- Include a copy of TCEQ's exception or variance approval letter, if applicable.
 - **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(1\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ's approval to the TWDB.
- U.S. Iron and Steel and Manufactured Good requirements for State Funded Programs or American Iron and Steel requirements for DWSRF and CWSRF projects
 - **Note:** These requirements must be addressed on the drawings **and** within the specifications.
- Documentation associated with special environmental conditions included in the environmental finding (such as USACE and floodplain administrator permit).
- Any permits required for the operation of project (such as wastewater discharge permits and water rights permit).
- The TWDB will conduct a review of the Design Package for compliance with TCEQ and programmatic rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the Design Package will be stamped approved by the TWDB, and a Design Package approval letter will be issued.

b. Work Package Front-End Document Template:

- The Owner or CMAR firm will submit for review a template set of contract front-end documents to be used with all Bid Packages on the project. The template must include the overall project scope, the template sub-contract agreement and/or purchase order agreement that will be used on all Work Packages, the appropriate TWDB SCC, and all project-relevant forms (see Attachment No. 1 – TWDB-0300A, Section 2.00).
- The TWDB will review this template and provide comments. Once all comments have been appropriately addressed, the TWDB will issue a front-end document template approval letter.
- The resulting preapproved set of front-end template documents will only need to be re-reviewed if there are any changes to the template or included documents are updated. Any changes to the SCC or template front-end documents must be discussed with, and approved by, TWDB staff prior to any revisions.
 - **Note:** This document template does not replace the need for Bid Package Review before the Bid Package is advertised to ensure eligibility for TWDB Funding.

c. Bid Package Review:

This section assumes the Work Package Front-End Document Template has previously been approved by the TWDB.

- To be eligible for TWDB review and approval, a Bid Package must:
 - Have a total probable cost greater than or equal to \$3,000,000; or
 - Consist of four or more Work Packages.

- A complete Bid Package to be submitted for review and approval by TWDB shall include:
 - The Front-End Document template that has been pre-approved by the TWDB (see Part I.B.5.b above). The template must now include a detailed description of the scope of work for each Work Package; contract time; date; location to submit proposals; etc., as well as any special environmental conditions for each work package to be bid.
 - The scope of work for each Work Package must reference a work element of a previously approved Design Package and identify the relevant technical specifications and plans sheets applicable to each Work Package.
 - The TWDB will conduct a review of the Bid Package for consistency with approved Design Package(s). A comment letter will be provided, if necessary, to communicate any needed revisions.
 - Once all comments have been appropriately addressed, the Bid Package will be stamped approved by the TWDB, and a Bid Package Approval letter will be issued. The Owner will be notified that the CMAR is authorized to advertise the Bid Package.

d. Bid Package Concurrence with Award:

- The CMAR shall submit the required documents for each Work Package in the Bid Package to TWDB for review and concurrence of award. Please see **Attachment No. 2: Alternative Delivery Contracts – Required Bid Documents** (*Bid Documents Section*) ([TAC § 363.43\(c\)\(1\)](#); [§ 371.63\(c\)\(2\) and \(d\)](#); [§ 375.83\(c\)\(2\) and \(d\)](#)).
 - The CMAR shall upload all required documentation for each Work Package in the Bid Package to the project website. The documents must follow the TWDB Naming Convention (Attachment No. 4) and remain accessible for the duration of the project.
- If the Bid Package was bid with draft P&S, not yet approved by the TWDB, include a transmittal letter and a change log addressing any changes between the bid set and construction set of P&S.
- Any addenda including design change(s) that are issued on an approved Design Package during the bidding process must be signed and sealed by a professional engineer licensed in the State of Texas as required by this guidance and outlined in Texas Engineering Practice Act and Rules Concerning the Practice of Engineering and Surveying (TBPELS) [§ 137.33\(f\)\(3\)](#). Addendum must be provided to TWDB for review as part of the Bid Package award submittal.
- The TWDB will conduct a review of the Bid Package Award documents for compliance with funding and procurement requirements. A comment letter will be provided, if necessary, to communicate any needed revisions.

e. Bid Package Concurrence with Notice to Proceed Review:

- The CMAR (or the Owner, if the CMAR bids on the Work Package), shall provide a copy of the fully executed CMAR/subcontractor contract documents for all Work Packages in a Bid Package for a consistency review ([Texas Water Code § 17.183](#) and [§ 17.184](#), as well as [TAC § 363.43\(c\)\(2\)](#); [§ 371.63\(f\)](#); [§ 375.83\(f\)](#)). The executed contract shall include the documents listed in **Attachment No. 2 - Alternative Delivery Contracts – Required Bid Documents** (*Executed Contract Documents Section*).
 - The CMAR shall upload all required documentation for each Work Package in the Bid Package to the project website. The documents must follow the TWDB

naming convention (Attachment No. 4) and remain accessible for the duration of the project.

- The Owner shall submit the CMAR contract amendment, GMP, or Partial GMP related to the Bid Package scope of work.
- The TWDB will review, at a minimum, all related documents for one Work Package in each Bid Package. If inconsistencies with TWDB rule and requirements are found during the review, additional Work Packages will be reviewed. A comment letter will be provided, if necessary, to communicate any bid-package-specific needed revisions.
 - At any time during the construction phase, the TWDB may review Work Packages in a Bid Package that was not reviewed at the time of the Bid Package Concurrence with Notice to Proceed Review.
- Once DBE approvals have been issued, if applicable, and all comments have been appropriately addressed, the TWDB will issue a Concurrence in Award and Concurrence in Notice to Proceed Letter as well as approval of the CMAR contract amendment or GMP.
 - **NOTE:** Bid Packages advertised with draft P&S *will not* be issued an approval letter by TWDB. Once a final Design Package relating to the Bid Package scope of work has been reviewed and approved by TWDB, and the approved Design Package P&S have been incorporated into the bid contract via change order(s), then TWDB may issue an approval letter for the Bid Package.

f. CMAR Bidding on Bid Packages (Self-Performance)

[Texas Gov't Code § 2269.255\(b\)](#) provides that the CMAR may seek to perform a portion of the work itself if the CMAR submits its bid or proposal for a portion of the work in the same manner as all other contractors or subcontractors. If the CMAR chooses to submit a bid, then the Owner will have the responsibility to determine if the CMAR's bid provides the best value for the Owner.

If the CMAR seeks to self-perform a portion of the work, then the Owner shall provide a description of the bid process and a certification that:

- the CMAR submitted its bid or proposal for that Bid Package in the same manner as all other trade contractors or subcontractors; and
- the Owner determined that the CMAR's bid proposal provided the best value.

g. Early Work Procurement:

There may be opportunities to perform some early work on a project. This may include work such as access roads, excavation, dewatering, and purchase of long-lead equipment. Any proposed early work must be clearly identified and discussed with TWDB prior to bidding. The Owner and CMAR shall provide justification for any proposed early work.

Note that:

- Proposed early work should be identified in the Owner/CMAR contract (see Part I.A.4);
- Proposed early work should meet the requirements of a Bid Package outlined in Part I.B.5.c;
- all early work to be procured must have an **approved environmental; determination and engineering feasibility report; and**
- all early work to be procured must have a complete Design Package approved by the TWDB.

C. Availability of Funds for CMAR Projects

Funds for planning, land acquisition, design, and construction activities are made available according to the funding program's specific rules and requirements; and upon receipt of sufficient documentation, approval by TWDB, and completion of all required milestones.

The general progression for the availability of funds is as follows:

1. Closing, Planning, and Land Acquisition Costs:

- a. *Fiscal Services funds*: Are released after Board commitment and completion of all closing prerequisites.
- b. *Planning Phase funds* (Permitting, Environmental, Engineering-Planning, and applicable special engineering): Are released after receipt of executed professional services contracts for the planning or permitting phase and upon completion of all closing-phase prerequisites.
- c. *Land Acquisition funds*: Are released after completion of applicable State or Federal land acquisition and appraisal rules (based on funding program). Land Acquisition funds may only be released after the issuance of the environmental determination.

2. Design and Construction Costs:

- a. *Design Phase funds*: Engineering design tasks (performed by the Owner's design engineer), are eligible for funding once the project's planning phase (including issuance of an environmental determination) has been approved and upon completion of all design-phase prerequisites.
- b. *CMAR Preconstruction Services*: Preconstruction services are eligible for funding after receipt of executed contracts for preconstruction services and upon approval of an engineering feasibility report (including issuance of an environmental determination for the project). CMAR contracts must be approved by TWDB prior to eligibility for funding of any preconstruction services by the CMAR (see Part I.B.3a-b above). Any special fees included in the CMAR contract (such as design phase service fees), will be made available in accordance with the terms of the contract and after all applicable requirements as described above have been met.
- c. *Construction Phase funds*: Construction phase costs are eligible for funding after the Owner and CMAR execute a Guaranteed Maximum Price (GMP) or agree on a Fixed Price, for the associated approved Bid Packages; the CMAR has provided the required performance and payment bonds, and TWDB has issued concurrence in NTP for each of the approved Bid Package (see Part No. I.B.5.e above).
 - Up to ninety-five percent of the approved and eligible construction costs are available when a NTP is issued. Funds for construction costs pending approval will be made available as they are approved. Note that funds are released according to program guidelines.
 - The final five percent of construction costs is available contingent upon TWDB's issuance of a Certificate of Approval (COA) for work associated with the approved package and for the project as a whole. A list of documents needed to issue a COA for a CMAR Bid Package can be found in Section 4 – Releasing Final Retainage on Construction Bid Packages below. The TWDB project manager will be able to provide clarification at the beginning of the construction project regarding any exceptions to the required documentation.
 - All contract amendments and change orders must be submitted to TWDB for review and approval prior to execution.

- Any construction phase service fees included in the Owner/CMAR contract will be available in accordance with the terms of the contract.

3. Ineligible Project Components:

In general, the following are not eligible for TWDB funding (note this is not an exhaustive list):

- a. Testing, remediation, or disposal of contaminated, potentially contaminated, or hazardous materials.
- b. Street paving beyond what is required to bring a street to the condition it was before the work began (for line work projects).
- c. Unallocated contingencies.
- d. Unallocated expenses.

4. Releasing Final Retainage on Construction Bid Packages:

Prior to approval for the release of final retainage on each CMAR contract amendment, GMP, or Partial GMP, the TWDB's Executive Administrator must issue a Certificate of Approval (COA) for each Bid Package.

- The CMAR (or Owner, when appropriate) shall submit a Bid Package COA Request to the TWDB. A complete Bid Package COA Request submittal must include:
 - A letter from the CMAR (or Owner, when appropriate) certifying that all work in the Bid Package has been completed and that all close out documents have been received for each Work Package in the Bid Package.
 - **COA Sub-Contract Checklist (Attachment No. 5)** and all required documents for each Work Package in the Bid Package.
- The TWDB will complete a detailed review of the close out document of, at a minimum, one Work Package in each Bid Package. The TWDB will complete a cursory review of the sub-contract checklist for all other Work Package in a Bid Package.
 - If inconsistencies with TWDB rule and requirements are found during the review, additional Work Packages will be reviewed. Should there be any comments, those will be communicated to the CMAR.
 - The CMAR (or Owner, when appropriate), may elect to submit all Bid Packages as a single COA request, conforming to the above COA guidance.

5. Project Completion and Close Out:

Once all work has been completed, the Owner will provide a copy of the following documentation to close out the TWDB project:

1. COA documentation for any Bid Package/Design Package that has not yet been closed
2. CMAR firm affidavit that all bills, except for retainage, have been paid.
3. Owner's project acceptance letter.
4. Request for release of any eligible funds that have not yet been released, following the procedures discussed above.
5. Confirmation by the Owner of the receipt of a complete set of "as-built" drawings (if applicable).

6. Any remaining final pay requests.
7. Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project completion.
8. Responsible Engineer's certification of contract completion date.
9. Certification by the Owner and CMAR firm that the project was completed in compliance with the U.S. Iron and Steel Requirements ([TWDB-1105-A](#)) (if applicable).
10. Final American Iron and Steel Certification ([TWDB-1106-C](#)) from the Owner and CMAR firm (if applicable).
11. All change orders not previously submitted/approved.
12. Project Public Awareness Certification ([TWDB-1109-A](#)) (if applicable)
13. Fiscal Sustainability Plan (if applicable)

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Part II – Design-Build Method

Requirements when using the DB Delivery Method

DB Delivery Method

Design-Build is a project delivery method that provides single-point accountability for both design and construction. In DB, the Owner contracts with a single entity to provide both design and construction services for the construction, rehabilitation, alteration, or repair of a facility.

This guidance is written to ensure compliance with [Texas Gov't Code Chapter 2269 Subchapter H](#), and programmatic requirements. The industry currently identifies a variety of DB processes, such as Progressive Design-Build and Fixed-Price Design Build. The Owner should consult the *Water and Wastewater Design-Build Handbook* (Fifth Edition), from the Water Collaborative Delivery Association (originally published under the Water Design-Build Council) and Design-Build Institute of America (2019), or other relevant literature, for further details on DB options available and consideration on how to structure its DB capital project. It is the Owner's responsibility to identify and ensure the DB process chosen is compliant with all applicable Texas Gov't Code requirements.

DB Phases:

- The Owner designates an engineer, independent of the DB firm, to serve as the Owner's representative throughout the project.
 - The selection of a DB firm is a two-step process, that begins with an RFQ prepared by the Owner. The RFQ shall include the criteria for selection of the DB firm as well as a design criteria package ([Texas Gov't Code § 2269.357](#)).
 - Each firm responding to the RFQ must be ready to certify to the Owner that each member of the DB firm's team was selected based on demonstrated competence and qualifications ([Texas Gov't Code § 2254.004](#)).
 - The Owner shall evaluate each DB's response, cost-related or price-related evaluation factors are not permitted at this stage ([Texas Gov't Code § 2269.359](#)).
 - The Owner will then request an additional proposal from qualified DB firms and shall select a DB firm using a combination of technical and cost proposals ([Texas Gov't Code § 2269.361](#)).
- Additionally, the Owner shall procure an Independent Engineer (if not in-house), based on demonstrated competence and qualifications ([Texas Gov't Code § 2254.004](#) & [Texas Gov't Code § 2269.355](#)).
- The Owner shall contract for other professional services, such as inspection services, materials testing, and verification of testing services ([Texas Gov't Code § 2269.356](#)).
 - The DB firm submits the design to the Owner to ensure scope compliance.
 - The DB proceeds to construct the project.

A. Project Pre-Planning when Seeking TWDB Funding

An Applicant, which is also usually the Owner, should keep the following steps in mind when seeking funding from the TWDB for the development of a project using the DB method.

1. Project Pre-Planning

The Applicant should begin to plan its project and evaluate the appropriate delivery method

to use based on criteria such as project complexity, size, cost, schedule, and risk. The Owner should also begin to evaluate potential financing options that would be compatible with the delivery method chosen.

TWDB staff strongly recommends that the project Owner consider engaging an in-house Project Management Team, consisting of representatives from engineering, operations and maintenance, finance, procurement or contracts, legal, and communications, to assist in the project definition, procurement of consultants and contractors, and implementation aspects of the DB method.

See Chapter One of the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association (originally published under the Water Design-Build Council), and Design Build-Institute of America (2019) for additional information on the owner's project implementation team membership and roles, as well as an example Organization Positions and Responsibilities table.

The TWDB recommends the Owner request an informational meeting with TWDB Regional staff at this phase to discuss potential funding options and TWDB funding requirements.

2. *Project Pre-Application Meeting with TWDB staff to Discuss DB*

The Owner must have a pre-application meeting with the TWDB as early as possible to discuss the proposed project and the alternative delivery method being considered. For CWSRF, DWSRF, SWIFT, and FIF projects, this meeting can be scheduled after the Applicant receives an invitation to apply.

3. *Risks and Responsibilities*

As part of the *Project Implementation Plan*, the TWDB recommends that the Owner develop a detailed risk and responsibilities matrix, to be included in the procurement documents. As described in the *Water and Wastewater Design-Build Handbook*⁶, a risk and responsibilities matrix "identifies foreseeable risks, the probability that each risk will occur, the potential impact of each risk, the party responsible for the risk, and how each risk will be managed if realized." Once the DB firm is selected, the matrix becomes fundamental in the preparation and negotiation of the agreement.

Additionally, the TWDB recommends that a preliminary risk register be developed for the project. A risk register catalogs risks and identifies the party responsible for mitigating them. More on the benefits of a risk and responsibilities matrix and risk register concepts, as well as examples of a risks and responsibilities matrix and a risk register, can also be found in the *Water and Wastewater Design Build Handbook* (See Table 3.2 – Examples of Allocated Risks and Responsibilities in Collaborative-Delivery Approaches, and Figure 3.2 – Sample Project Risk Register.)

4. *Selection of a DB firm:*

The Owner should select the DB firm in compliance with all the requirements of [Texas Gov't Code Chapter 2269](#). All contracts to be funded by the TWDB shall include the applicable TWDB Supplemental Contract Conditions (SCC) in their entirety (or as modified with agreement and prior written approval of the TWDB) and all applicable TWDB

⁶ Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association, originally published under the Water Design-Build Council, and Design-Build Institute of America (2019)

programmatic forms (see “Resources” section above, for links to these resources).

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the DB firm must be approved **prior** to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and AD firm can be found in Attachment No. 3.

DB contract – A comprehensive list of items to consider when preparing a DB contract can be found in the [Water/Wastewater Sector, Design-Build Done Right™](#) 2015 publication from the Design-Build Institute of America⁷. TWDB staff recommends that the Owner refers to this resource when preparing its DB contract.

The TWDB recommends that the DB contract include:

- identification of significant project-specific risks and a clear identification of how those risks will be handled;
- fair (and clear) process for review and resolution of potential changes to the contract and adjustments in contract price and time;
- dispute resolution process;
- the contract should clearly specify the owner’s role during project execution, including acting upon design and other submittals, and role in quality assurance/quality control (QA/QC);
- define the role of the engineer of record and how they will communicate with the owner; and,
- documentation to address responsibilities for testing, and inspection, and quality control during construction must be provided.

B. TWDB Project Implementation Processes using DB

Below are general TWDB project guidelines when using the DB delivery method. The Owner should discuss the guidelines below with the Regional Water Project Development (RWPD) Team assigned to its project and clarify any questions early in the process.

The Owner is referred to the Design Package Submittal Form (Attachment 1 – TWDB-0300A), the Alternative Delivery Work Package Award Submittal Form (Attachment 2 – TWDB-0400A), for an overview of the requirements applicable to each funding program. **All submittals must be in a high quality, fully searchable, PDF format, contain the correct TWDB project identifier, be bookmarked, or indexed, and address all required submittal items. Submittals not meeting these requirements will not be accepted for review.**

1. Application Phase

- a. A pre-application meeting must be held prior to submittal of an application for funding the proposed DB project.
- b. The Owner/Applicant submits a complete application. See [TWDB application form](#) or the [online application \(OLA\)](#).
- c. If the project’s planning phase is complete and the Applicant is requesting funds for the subsequent design and construction phases, then an Engineering Feasibility Report (EFR) and a [Federal Environmental Review Form](#) (for Federal Programs) or an

⁷ *Water/Wastewater Sector, Design-Build Done Right™, Design-Build Practices, Design-Build Institute of America. December 2015.*

[Environmental Data Form](#) (for State Programs) will be required as part of the application.

- d. The Owner will provide a formal letter requesting the use of the DB method and clarifying the benefits that DB will provide over the traditional DBB method. The applicant shall ensure that the following are addressed in their request letter:
- document the benefits of using an AD method in accordance with the requirements of [Texas Gov't Code § 2269.056](#);
 - reference the appropriate section of [Texas Gov't Code Chapter 2269, Subchapter H](#), including (but not limited to)
 - Owner has used the minimum criteria as a minimum basis for determining the design-build method is appropriate for the project ([Texas Gov't Code § 2269.353\(c\)](#)):
 - The extent to which the entity can adequately define the project requirements;
 - The time constraints for the delivery of the project;
 - The ability to ensure that a competitive procurement can be held; and
 - The capability of the entity to manage and oversee the project, including the availability of experienced personnel or outside consultants who are familiar with the design-build method of project delivery.
 - Project is a single integrated project ([Texas Gov't Code § 2269.353\(b\)](#));
 - Owner's population is greater than 100,000 within its geographic boundary or service area ([Texas Gov't Code § 2269.352\(1\)](#));
 - Entity is a board of trustees governed by Chapter 54, Transportation Code ([Texas Gov't Code § 2269.352\(2\)](#));
 - Owner's service area and number of DB projects ([Texas Gov't Code § 2269.354](#)); and,
 - Independence of the Owner's Engineer from the DB firm ([Texas Gov't Code § 2269.355\(a\)](#)).

2. Independent Engineer Firm Selection

- a. Contracts for engineering services must be submitted for review prior to execution. Note that this review by the TWDB is not to determine the legal validity of the contract, but to evaluate scope of work and eligibility for funding through the TWDB funding programs.
- b. For DWSRF and CWSRF Equivalency funding, all professional services must follow the DBE requirements set forth in [TWDB-0210](#). All DBE forms must be submitted for review and approval, prior to execution of the contract to ensure eligibility of funding.
- c. For CWSRF Equivalency funding, the Applicant must certify that the consulting engineer services were procured in accordance with the requirements of the Federal Water Pollution Control Act as interpreted by the Environmental Protection Agency (See [TWDB-1108](#))
- d. The Owner shall provide a certification regarding independence of its representative engineer (Independent Engineer) per [Texas Gov't Code § 2269.355](#).

3. DB Firm Selection, Documentation, and Contract Review

The Owner's contract with the DB firm, as well as the advertisement for proposals, must include all program specific language and bonding requirements as found in the TWDB SCC:

CWSRF & DWSRF Equivalency projects ([TWDB-0550](#))
CWSRF & DWSRF Non-Equivalency projects ([TWDB-0551](#))
State loan projects ([TWDB-0552](#))

Please note, the TWDB SCC should be included in the contract documents and will not be accepted if added not as an appendix.

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the DB firm must be approved **prior** to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and DB firm can be found in Attachment No. 3.

a. Draft DB Contract Review

- The Owner shall provide documentation that the Owner meets the legal requirements to use the DB delivery method to construct the project, including:
 - Owner has used the minimum criteria as a minimum basis for determining the design-build method is appropriate for the project ([Texas Gov't Code § 2269.353\(c\)](#)):
 - The extent to which the entity can adequately define the project requirements;
 - The time constraints for the delivery of the project;
 - The ability to ensure that a competitive procurement can be held; and
 - The capability of the entity to manage and oversee the project, including the availability of experienced personnel or outside consultants who are familiar with the design-build method of project delivery.
 - Project is a single integrated project ([Texas Gov't Code § 2269.353\(b\)](#));
 - Owner's population is greater than 100,000 within its geographic boundary or service area ([Texas Gov't Code § 2269.352\(1\)](#));
 - Entity is a board of trustees governed by Chapter 54, Transportation Code ([Texas Gov't Code § 2269.352\(2\)](#));
 - Owner's service area and number of DB projects ([Texas Gov't Code § 2269.354](#)); and,
 - Independence of the Owner's Engineer from the DB firm ([Texas Gov't Code § 2269.355\(a\)](#)).
- Owner shall provide documentation to demonstrate compliance with [Texas Gov't Code § 2269.357](#) through § 2269.362. All submittals shall be in a high quality, fully searchable PDF format. Documentation shall include:
 - Copy of the Request for Qualifications ([Texas Gov't Code § 2269.357](#));
 - Design Criteria Package ([Texas Gov't Code § 2269.358](#));
 - Evaluation of DB Firms ([Texas Gov't Code § 2269.359](#)). Including DB certification that its designated or selected engineer was procured based on demonstrated competence and qualifications as required in [Texas Gov't Code § 2254.004](#) ([Texas Gov't Code § 2269.359](#)); and
 - If DWSRF or CWSRF Equivalency funding, the applicable set of Disadvantaged Business Enterprise forms (see [TWDB-0210](#)) and appropriate supporting documentation.
- The Owner submits a copy of the draft DB contract, for review for compliance with

TWDB funding program requirements:

- All TWDB programmatic requirements as provided in the appropriate version of the TWDB SCC ([TWDB-0550](#), [0551](#) or [0552](#)) must be included in the DB contract. Any modifications to the SCC must receive prior written approval by the TWDB project manager.
- The contract should clearly identify the Owner's and the DB firm's expectations on issues such as role of the Owner's representative (if applicable), expectations on performance guarantees, role of the designer(s) of record (Design Engineer or Engineer of Record), commissioning, acceptance, testing, inspection, project close out, etc.
- TWDB will provide a comment letter, if necessary, to communicate any concerns with the draft contract.
- Once all concerns have been properly addressed, the TWDB will concur in the award of the contract.

b. Executed DB Contract Review

- The Owner will execute the DB contract and submit a copy of the executed contract to the TWDB.
 - Note that the DB will provide the performance and payment bonds in an amount not less than 100-percent of the construction amount and meet the requirements [of Texas Water Code §17.183\(2\)\(A\) and \(B\)](#). Per [Texas Gov't Code § 2269.367\(c\)](#), if at this time the DB cannot provide performance and payment bonds, it shall provide a bid bond or other financial security acceptable to the Owner, to ensure that the performance and payment bonds will be provided before beginning of construction activities, as provided in [Texas Gov't Code § 2269.311](#).
- The TWDB will provide a comment letter, if necessary, to communicate any concerns with the executed contract.
- Once all comments have been addressed the TWDB will accept the DB contract. For details on when work elements are eligible for funding see Part II.C Availability of Funds for DB Projects.

4. Planning and Acquisition for DB Projects

This guidance discusses only the design and construction phases of an DB project. For projects using TWDB funding for planning activities, such as land acquisition and environmental clearance, the activities must be completed prior to the approval of design and construction documents and prior to the approval of release of funds for design and construction activities.

Further, if land acquisition is a project component, the environmental review related to the land acquisition must be completed and an environmental determination issued by the TWDB, prior to the release of funds for land acquisition.

Planning phase submittals include (1) an Environmental Document, and (2) an Engineering Feasibility Report (EFR). Guidance for these submittals is discussed in the following documents, which can be found at the TWDB website:

- Engineering Feasibility Report Guidance:
 - [Water Projects](#)

- [Wastewater Projects](#)
- [Flood Projects](#)
- [Federal Environmental Review \(EID\)](#)
- [Environmental Data Form for State Programs](#)

The Planning phase is complete upon issuance of an Environmental Determination and subsequent approval of the EFR.

5. Preparation of Design Packages

This section discusses DB Design Package submittals that will be reviewed for TWDB program funding requirements and TCEQ Design Criteria. For a TWDB funded project, TWDB approval of the Design Packages must be obtained in order to ensure the project maintains its eligibility for TWDB funding.

This section discusses the process to submit Design Packages for review and approval. Prior to submitting documents for review, please ensure that the following items are addressed:

- a. The Owner or DB Firm must create a website or file sharing page where all project documents will be stored and accessible to the TWDB for the life of the loan. Documents must be named following the Naming Convention found in Attachment No. 4.
- b. [Texas Water Code § 17.183\(b\)](#) requires plans and specifications submitted to the board in connection with an application for financial assistance must include a seal by a licensed engineer affirming that the plans and specifications are consistent with and conform to current industry design and construction standards.
- c. The applicable Document Submittal Checklist is completed including page references to all review items.
 - Design Package Submittal Form (TWDB-0300)
 - Alternative Delivery Work Package Award Submittal Form ([TWDB-0400A](#))
- d. Bookmark or index all submittals to reduce review time and potential comments. Submittals that are not bookmarked will not be accepted.
- e. Submittals shall be in a high quality, fully searchable PDF format. Submittals that are not searchable will not be accepted.
- f. The Entity should certify that they have performed Quality Assurance and Quality Control (QA/QC) review on the documents submitted to TWDB for review or approval. The entities certification shall ensure that things such as:
 - The correct TWDB project identifier is used on all documents.
 - Documents are properly signed and notarized, as applicable.
 - If the Owner is seeking funding from TWDB for all project elements, then all project elements should receive approval from TWDB prior to construction.
 - Submittal is complete (bookmarked, searchable, no missing pages or information), concise, and accurate
 - Avoid duplication of attachments, guidance, or forms within a document.

a. Design Package Review:

- The Owner or DB Firm will submit for review a complete Design Package, signed and

sealed by a licensed professional engineer registered in the State of Texas. A Design Package must address the following items:

- Include a completed copy of the **Design Package Submittal Form (Attachment No. 1 – TWDB-300A)**. If you have questions, please discuss with the TWDB project manager.
- Include a copy of TCEQ's approval letter of the complete set of P&S, if applicable.
 - **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ's technical review and approval of the complete set of P&S.
- Include a copy of TCEQ's exception or variance approval letter, if applicable.
 - **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(l\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ's approval to the TWDB.
- U.S. Iron and Steel and Manufactured Good requirements for State Funded Programs or American Iron and Steel requirements for DWSRF and CWSRF Projects.
 - **Note:** These requirements must be addressed on the drawings and within the specifications.
- Documentation associated with special environmental conditions included in the environmental finding (such as USACE and floodplain administrator permit).
- Any permits required for the operation of project (such as wastewater discharge permits and water rights permit).
- The TWDB will conduct a review of the Design Package for compliance with TCEQ rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the Design Package will be stamped approved by the TWDB, and the TWDB will issue a Concurrence in Notice to Proceed letter.

C. Availability of Funds for DB Projects

Funds for planning, land acquisition, design, and construction are made available according to the funding program's specific rules and requirements; and upon receipt of sufficient documentation, approval by TWDB, and completion of all required milestones.

The general progression for the availability of funds is as follows:

1. Closing, Planning, and Land Acquisition Costs:

- a. *Fiscal Services funds:* Are released after Board commitment and completion of all closing prerequisites.
- b. *Planning Phase funds* (Permitting, Environmental, Engineering-Planning, and applicable special engineering): Are released after receipt of executed professional services contracts for the planning or permitting phase and upon completion of all planning-phase prerequisites.
- c. *Land Acquisition funds:* Are released after completion of applicable State or Federal land acquisition and appraisal rules (based on funding program). Land Acquisition funds may

only be released after the issuance of the environmental determination.

2. Design and Construction Costs:

- a. *Design Phase funds:* Engineering design tasks are eligible for funding after receipt of executed contracts for the design phase and upon approval of an engineering feasibility report (including issuance of an environmental determination for the project). DB contracts must be accepted by TWDB prior to eligibility for design funding (see Part II.B.4 above). Any special fees included in this contract will be made available in accordance with the terms of the contract and after all applicable requirements as described above have been met.
- b. *Construction Phase funds:* Construction phase costs are eligible for funding after issuance of any applicable permits and after design package approval and issuance of concurrence with NTP (see Part II.B.5. above).
 - Ninety-five percent of the design package cost are available when a NTP is issued. Note that funds are released according to program guidelines.
 - Availability of the remaining five percent will be contingent upon TWDB's issuance of a Certificate of Approval (COA) for work associated with the approved Design Package. A list of documents needed to issue a COA for a DB Design Package can be found in Section 4 – Releasing Retainage on Construction Design Packages below. There may be a few exceptions to the required documents, about which the TWDB project manager will be able to provide clarification at the beginning of the construction project.
 - All contract amendments and change orders must be submitted to TWDB for review and approval prior to execution.

3. Ineligible Project Components:

In general, the following are not eligible for TWDB funding (note this is not an exhaustive list):

- a. Testing, remediation, or disposal of contaminated, potentially contaminated, or hazardous materials.
- b. Street paving beyond what is required to bring a street to the condition it was before the work began (for line work projects).
- c. Unallocated contingencies.
- d. Unallocated expenses.

4. Releasing Final Retainage on Construction Design Packages

Prior to approval for the release of final retainage on each DB contract amendment, GMP, or Partial GMP, the TWDB's Executive Administrator must issue a Certificate of Approval (COA) for each Design Package.

The DB firm (or Owner, when appropriate) shall submit the documents listed below for the approval process (please discuss this list with the TWDB project manager as some of these may not apply to a particular package).

- Certification from the Owner and DB firm that the project included in the Design Package was completed in accordance with approved contract documents (plans and specifications).

- Copy of the final pay request.
- Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of completion of the work.
- Certification by the Owner that the project was completed in compliance with the U.S. Iron and Steel Requirements ([TWDB-1105-A](#)) (if applicable).
- Final American Iron and Steel Certification ([TWDB-1106-C](#)) from the Owner (if applicable).
- All change orders issued for the Design Package have been approved.

5. Project Completion and Close Out:

Once all work has been completed, the Owner will provide a copy of the following documentation:

1. COA documentation for any Bid Package/Design Package that has not yet been closed
2. DB firm affidavit that all bills, except for retainage, have been paid.
3. Owner's project acceptance letter.
4. Request for release of any eligible funds that have not yet been released, following the procedures discussed above.
5. Confirmation by the Owner of the receipt of a complete set of "as-built" drawings (if applicable).
6. Any remaining final pay requests.
7. Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project completion.
8. Responsible Engineer's certification of contract completion date.
9. Certification by the Owner and DB firm that the project was completed in compliance with the U.S. Iron and Steel Requirements ([TWDB-1105-A](#)) (if applicable).
10. Final American Iron and Steel Certification ([TWDB-1106-C](#)) from the Owner and DB firm (if applicable).
11. All change orders not previously submitted/approved.
12. Project Public Awareness Certification ([TWDB-1109-A](#)) (if applicable)
13. Fiscal Sustainability Plan (if applicable)

Attachment No. 1:

Design Package Submittal Form

The Alternative Delivery Design Package Submittal Form (TWDB-0300A) must be included with a Design Package submittal for TWDB review and approval. If there are any questions about the required documentation or language, please contact the project's TWDB Review Engineer.

1.00	To be included in the Notice to Bidders, and Instructions to Bidders (refer to the most recent version of the appropriate Supplemental Contract Conditions under item 2.00 below):	CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Programs	Location (Section, page, etc.)
1.01	Contingent Award of Contract	Y	Y	Y	Y	Y	Y	Y	
1.02	U.S. Iron and Steel and Manufactured Goods*					Y	Y	Y	
1.03	American Iron and Steel	Y	Y	Y	Y				
1.04	Award of Contract to Nonresident Bidder (see form TWDB-0453)		Y		Y	Y	Y	Y	
1.05	Davis-Bacon Wage Act	Y	Y	Y	Y				
1.06	Disadvantaged Business Enterprise	Y		Y					
1.07	Funded by TWDB Language	Y	Y	Y	Y	Y	Y	Y	
1.08	Equal Employment Opportunity and Affirmative Action	Y	Y	Y	Y				
1.09	Debarment and Suspension Certification	Y			Y				
Applicable Programs									
2.00	TWDB Documents/Forms To be Included in the Front-End Document Template (refer to TWDB-0570 Part No. II.D.1.a):	CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Program	Location (Section, page, etc.)
2.01	Supplemental Contract Conditions for State Loan Projects (TWDB-0552)					Y	Y	Y	
2.02	Supplemental Contract Conditions for CWSRF & DWSRF Equiv. Projects (TWDB-0550)	Y		Y					
2.03	Supplemental Contract Conditions for CWSRF & DWSRF Non-Equiv. Projects (TWDB-0453)		Y		Y				
2.04	Vendor Compliance with Reciprocity of Non-Resident Bidders (TWDB-0453)		Y		Y	Y	Y	Y	
2.05	Bidder's Certifications Form (WRD-255)	Y	Y	Y	Y				
2.06	Debarment / Suspension Certification (SRF-404)	Y		Y					
2.07	Monthly Davis Bacon Wage Rates	Y	Y	Y	Y				
2.08	Bid Proposal	Y	Y	Y	Y	Y	Y	Y	
2.09	Separate eligible and ineligible bid items (if applicable)	Y	Y	Y	Y	Y	Y	Y	
2.10	Trench Safety as separate bid item, and priced per linear foot (if applicable)	Y	Y	Y	Y	Y	Y	Y	
2.11	Green components as separate bid items (if applicable)	Y	Y	Y	Y				
2.12	Notice to Bidders	Y	Y	Y	Y	Y	Y	Y	
2.13	Contract Agreement Template	Y	Y	Y	Y	Y	Y	Y	
2.14	Equipment Purchase Order Template	Y	Y	Y	Y	Y	Y	Y	
Applicable Programs									
3.00	To be included in the Specifications (refer to TWDB-0570 Part No. II.D.1.b):	CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Program	Location (Section, page, etc.)
3.01	Monthly American Iron and Steel Certificate (TWDB-1106-A)	Y	Y	Y	Y				
3.02	American Iron and Steel (AIS) De Minimis Log (TWDB-1106-B)	Y	Y	Y	Y				
3.03	United States (U.S.) Iron and Steel Certificate (TWDB-1105-A)					Y	Y	Y	
3.04	Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Sub-Recipient) (DB-0154)	Y	Y	Y	Y				
3.05	Environmental Review Conditions	Y	Y	Y	Y	Y	Y	Y	
Applicable Programs									
4.00	To be Mentioned in Plans:	CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Program	Location (Section, page, etc.)
4.01	U.S. Iron and Steel and Manufactured Goods*					Y	Y	Y	
4.02	American Iron and Steel	Y	Y	Y	Y				
4.03	Environmental Review Conditions	Y	Y	Y	Y	Y	Y	Y	
Applicable Programs									
5.00	Additional Information:	CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Program	Location (Section, page, etc.)
5.01	Construction inspection provisions****	Y	Y	Y	Y	Y	Y	Y	
5.02	Site Certificate (ED-10)***	Y	Y	Y	Y	Y	Y	Y	
Applicable Programs									
Guidance Documents - For Information Purposes ONLY (available online at www.twdb.texas.gov/financial/instructions)		CWSRF EQ	CWSRF NEQ	DWSRF EQ	DWSRF NEQ	SWIFT	EDAP	All Other State Funded Program	Location (Section, page, etc.)
Disadvantaged Business Enterprise Guidance (TWDB-0210)		Y		Y					
U.S. Iron and Steel and Manufactured Goods (TWDB-1105)*						Y	Y	Y	
Requirements for American Iron and Steel (AIS) Guidance (TWDB-1106)		Y	Y	Y	Y				

* Consult guidance TWDB-1105 or discuss with your TWDB engineer or team manager for exceptions to some SWIFT projects.
 ** TWDB-0551 is currently under revision to add requirements for the new Non-Equivalency funding option under the DWSRF program.
 *** To be submitted by project Owner
 **** To be submitted by Alternative Delivery Firm, as applicable

Attachment No. 2:

Alternative Delivery Contracts – Required Bid Documents

Based on the funding program, the following language and forms must be included in the CMAR, DB, and Work Package contracts. These documents must be provided to the TWDB for all Work Packages in a Bid Package and remain available for the life of the project. Please submit the [Alternative Delivery Work Package Award Submittal Form](#) for each Work Package in a Bid Package to have a complete Bid Package submittal for review.

4.00	The following Items are required for TWDB issuance of Concurrence of Award:	CMAR		DB		Location (Section, page, etc.)
		Owner-CMAR	CMAR – Work Package	Owner-DB	DB – Design Package	
4.01	TWDB Plans and Specifications Acceptance Letter	Y	Y	Y	Y	
4.02	Bid Advertisement and Publisher's Affidavit	For CMAR procurement requirements see guidance (TWDB-0570)	Y	For DB procurement requirements see guidance (TWDB-0570)		
4.03	Bid Tabulation showing all bids received		Y			
4.04	Recommended sub-contractor's complete and signed bid proposal		Y			
4.05	Copies of all 100 percent complete approved for construction design plans and specifications and addenda issued		Y			
4.06	Bid Bond (required if the CD firm is not able to furnish payment and performance bonds within ten (10) days after the CD firm executes the contract)	Y		Y		
4.07	Bidder's Certification (WRD-255) - Required for both, subcontracts and purchase orders and for the provision of services and materials (OGC-Ref.41 CFR 60-1.1) (if funding through DWSRF or CWSRF)	Y	Y	Y		
4.08	Debarment/Suspension Certification (SRF-404) – by Owner for CD Firm (if funding through DWSRF Equivalency or CWSRF Equivalency)	Y	Y	Y		
4.09	Vendor compliance with Reciprocity of Non-Resident Bidder (TWDB-0459) (if funded through state programs)	Y	Y	Y		
4.10	DBE – TWDB-0216 with Supporting Documentation (if funding through DWSRF Equivalency or CWSRF Equivalency)	Y	Y	Y	Y	
4.11	DBE – TWDB-0217 (if funding through DWSRF Equivalency or CWSRF Equivalency)	Y	Y	Y	Y	
4.12	DBE – TWDB-0373 (if funding through DWSRF Equivalency or CWSRF Equivalency)	Y	Y	Y	Y	
5.00	The following Items are required for TWDB issuance of Concurrence in Notice to Proceed:	Owner-CMAR	CMAR – Work Package	Owner-DB	DB – Design Package	
5.01	A copy of the RFP for a one-step process or RFP and RFQ for a two-step process (Texas Gov't Code § 2269.253 and 2269.357)	Y		Y		
5.02	Bid Advertisement and Publishers Affidavit	Y		Y		
5.03	Bid Tabulation showing all bids received. Including certification that its designated or selected engineer was procured based on demonstrated competence and qualifications as required in Texas Gov't Code § 2254.004	Y		Y		
5.04	Recommended alternative delivery contractor's complete and signed bid proposal	Y		Y		
5.05	Fully Executed Contract Agreement	Y		Y		
5.06	Appropriate and up to date TWDB Supplemental Contract Conditions for the funding source (in the body of the contract, not as an appendix)	Y		Y		
5.07	Contractor's Act of Assurance (ED-103)	Y		Y		
5.08	Contractor's Act of Assurance Resolution (ED-104)	Y		Y		
5.09	Executed Payment Bond (Water Code Sec 17.183: bond in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision) This language must be included in the body of the Bond.	Y		Y		
5.10	Executed Performance Bond (Water Code Sec 17.183: bond is in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision) This language must be included in the body of the Bond.	Y		Y		
5.11	Workman's Compensation and other insurance coverage	Y	Y	Y		
5.12	Plan for EPA's Public Awareness Program TWDB-1109-A with supporting documentation	Y	Y	Y		
5.13	TWDB issued Water Rights Certification (When project develops water)	Y	Y	Y		

Attachment No. 3:

Alternative Delivery Document Naming Convention

The CMAR shall upload all required documentation to the project website. The documents must follow the TWDB naming convention below and remain accessible for the duration of the project.

Alternative Delivery Document Naming Convention			
Document Type	Abbreviation	Document Type	Abbreviation
AD Work Package Award Submittal Form	TWDB-0400A	Engineering Feasibility Report Comments	EFRC
Addendum/Addenda	AA	Final Engineering Report	ER
Award Documents	AC	Green Project Reserve Review Documents	GPR
Bid Bond	B-BID	Guaranteed Maximum Price	GMP
Bid Documents	BID-D	Invitation to Bid	ITB
Bid Package	BP	Issued for Bid	IFB
Bid Recommendation	BR	Issued for Construction	IFC
Bid Tab	BID-T	Monthly Progress Report	MPR
Certificate of Insurance	COI	Payment Bond	B-PAY
Change Log	CL	Performance Bond	B-PER
Change Order	CO	Plans and Specs Approval	PSA
Close Out Document	COA	Plans and Specs Review Comments	PSRC
CMAR Agreement	CMAR-AGR	Preconstruction Conference	PCC
CMAR Agreement Amendment	CMAR-AGR-A	Preliminary Engineering Report	PER
DB Agreement	DB-AGR	Purchase Order	PO
DB Agreement Amendment	DB-AGR-A	Recommendation of Award	ROA
Design Package	DP	Recommended Bid Proposal	RBP
Design Package Submittal Form	TWDB-0300A	Reduction in Retainage	RR
EFR Submittal Form	TWDB-0200	Subcontract Agreement	SA
Engineering Agreements	ENG-AGR	TCEQ Design Approval	TCEQ-DA
Engineering Agreements Amendments	ENG-AGR-A	Technical Review Comment Response	TRCR
Engineering Feasibility Report Approval	EFRA	Work Package	WP

Attachment No. 4:

Disadvantaged Business Enterprise Process for CMAR and DB Projects

Construction Manager at Risk (CMAR) Projects:

1. Approval of loan recipient's procurement of the CMAR:
 - a. Forms needed from loan recipient: [TWDB-0216](#) with supporting documentation and [TWDB-0373](#).
 - b. Forms needed from CMAR: [TWDB-0217](#).

2. CMAR procurement of sub-contractors:
 - a. *If Using a One-Step Procurement Process:*

As the CMAR procures sub-contractors, the CMAR submits form [TWDB-0216](#) with supporting documentation and form [TWDB-0373](#) for each sub-contractor.

 - b. *If Using a Two-Step Procurement Process:*
 - i. The two-step process includes the CMAR issuing a Request for Interest (RFI), creating a pre-qualification list, then issuing a Request for Proposal (RFP).
 1. Goal of the RFI: to compile a list of sub-contractors that are interested in performing work on the project. The RFI informs all interested contractors of the TWDB and other requirements on the project.
 2. Goal of the RFP: a selected scope of work from the overall RFI scope of work for the smaller Work Package. Please note that during the RFP additional solicitation may be done to ensure the bid is competitive if not enough sub-contractors in that line of work responded to the RFI.

 - ii. DBE forms to be submitted to the TWDB:
 1. If the Recommended Contractor is on the RFI Pre-Qualification List, then the CMAR submits [TWDB-0216](#) with supporting documentation from RFI; and [TWDB-0373](#).
 2. If the Recommended Contractor is not on the RFI Pre-Qualification List, then the CMAR submits [TWDB-0216](#) with supporting documentation for the additional solicitation done during the RFP and revised [TWDB-0373](#).

Design-Build Projects:

1. Approval of loan recipient's procurement of the DB Firm:
 - a. Forms needed from loan recipient: [TWDB-0216](#) with supporting documentation; and [TWDB-0373](#).
 - b. Forms needed from DB Firm: [TWDB-0217](#)

2. Design-Builder procurement of sub-contractors:
 - a. As the Design-Builder procures sub-contractors, the DB firm submits, for each sub-contractor form [TWDB-0216](#) with supporting documentation and form [TWDB-0373](#).

Attachment No. 5:

CMAR COA Checklist for Construction Sub-Contracts

CMAR: _____

Work Package Number: _____

TWDB Project Number: _____

Sub-Contractor: _____

- Letter from CMAR, or Owner when appropriate, certifying that all work in Bid Package has been completed and all close out documents for the Work Package received.
Dated on: _____
Location (file name, PDF page number, etc.) _____
- Statement that the project was completed in accordance with approved P&S from CMAR, or Owner when appropriate. Dated on: _____
Location: _____
- Confirmation by the CMAR, Owner, or engineer of the receipt of a complete set of "as-built" drawing. Received on: _____
Location: _____
- Sub-Contractor's final pay request: Dated on: _____
Shows final work package contract amount of \$ _____
Location: _____
- Sub-Contractor's affidavit that all bills, except for retainage, have been paid. Dated on: _____
Location: _____
- Warranty statement with duration of at least 12-month from the date of project's completion.
Warranty start date: _____
Location: _____
- Acceptance letter signed by the CMAR, or Owner when appropriate. Dated on: _____
Location: _____
- Certification by the CMAR or Sub-Contractor that the project was completed in compliance with the U.S. Iron and Steel Requirements (TWDB-1105-A) (*if applicable*). Date received: _____
Location: _____
- Final American Iron and Steel Certification (TWDB-1106-C) from the CMAR or Sub-Contractor has been received (if applicable) (See TWDB-1106 guidance, item 9 under TWDB Compliance Procedures). Date received: _____
Location: _____
- All change orders have been approved - Y/N: _____
Location: _____
- A PCC for this contract was conducted on: _____
- A contract final inspection with TWDB in attendance was conducted on: _____

CMAR COA Checklist for Equipment Purchase Sub-Contracts

CMAR: _____

Work Package Number: _____

TWDB Project Number: _____

Sub-Contractor: _____

- Letter from CMAR, or Owner when appropriate, certifying that all work in Bid Package has been completed and all close out documents for the Work Package received. Dated on: _____
Location (file name, PDF page number, etc.) _____
- Statement that the project was completed in accordance with approved P&S from CMAR, or Owner when appropriate. Dated on: _____
Location: _____
- Invoices or other accounting records showing final project cost
Date of invoice or documentation: _____
Shows final project cost of \$ _____
Location: _____
- Warranty information. Often on equipment purchase, the warranty is from the date of purchase or delivery. Warranty start date: _____
Location: _____
- Documentation of any change orders, including invoices, have been approved – Y/N: _____
Location: _____
- Certification by the CMAR or Sub-Contractor that the project was completed in compliance with the U.S. Iron and Steel Requirements (TWDB-1105-A) (*if applicable*).
Date received: _____
Location: _____
- Final American Iron and Steel Certification (TWDB-1106-C) from the CMAR or Sub-Contractor has been received (*if applicable*) (See TWDB-1106 guidance, item 9 under TWDB Compliance Procedures). Date received: _____
Location: _____
- A PCC for this contract was conducted on: _____
- A contract final inspection with TWDB in attendance was conducted on: _____