PIONEER PROGRAM GUIDELINES

THIRD EDITION

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Acknowledgements

2020 Pioneer Program Guidelines Update

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Through a series of meetings, the Department reviewed and discussed industry practices and lessons learned regarding the development and implementation of alternative project delivery methods including Construction Manager at Risk, Design-Build, Public-Private Partnerships, and the Department's Unsolicited Proposal process. This update, and related reference documents, represent the work and decisions of the Project Management Division, Construction Administration Division, and State Attorney General's Office. In addition, the Department received outstanding cooperation and support from the Associated General Contractors of Nevada and the Nevada Transportation Board. The collaborative effort and dedication of the Department team members is hereby recognized and appreciated.

Under the direction of Kristina Swallow, Director; Cole Mortenson, Deputy Director; Cliff Lawson, Deputy Director; and, Nick Johnson, Project Management Chief, the Pioneer Program Guidelines Team completed the 2020 update.

2020 Department Team Members

Pedro Rodriguez, Project Management Assistant Chief Nick Johnson, Project Management Chief Jae Pullen, Senior Project Manager Lynnette Russell, Project Management Assistant Chief Dale Keller, Project Management Assistant Chief Jeff Lerud, Senior Project Manager Ryan Wheeler, Senior Project Manager Jenica Finnerty, Senior Project Manager Sharon Foerschler, Chief Construction Engineer Sam Lompa, Assistant Chief Construction Engineer Stephen Lani, Assistant Chief Construction Engineer Steven Conner, Assistant Director I Engineer Shane Chesney, Deputy Attorney General Angela Tanner, Project Management Admin Assistant

2020 Key Service Provider Team Members

The following individuals provided substantial input during development of the 2020 update.

John Munoz, CDM Smith Jim Gallegos, CDM Smith Jeremiah Johnston, Avenue Consultants Ryan Mitchell, CDM Smith Mike Wawzkiewicz, CDM Smith Andrew Gemperline, Avenue Consultants Melissa Galatzer, CDM Smith Katy O'Brien-Connell, CDM Smith





Original Pioneer Program Guidelines

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Original Department Team Members

R. Scott Rawlins, Deputy Director Rudy Malfabon, Deputy Director Louis Holland, Senior Deputy Attorney General Amir Soltani, Project Management Chief Jenica Finnerty, Project Management Assistant Chief John Terry, Project Management Assistant Chief David Olsen, Chief Accountant Jeffrey Shapiro, Chief Construction Engineer Steve Cooke, Chief Environmental Services Roc Stacey, Contract Compliance Manager Maureen Martinez, Risk Management Marty Espinoza, Administrative Services Elizabeth Isenhart, Administrative Services Jim Gallegos, Senior Project Manager Anthony Lorenzi, Senior Project Manager Adam Searcy, Project Manager Angela Tanner, Project Management Admin Assistant Kimberly Diegle, Rotating Engineer Maria Maness, Rotating Engineer Alma Piceno-Ramirez, Rotating Engineer





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Appendix I Instructions to Unsolicited Proposers

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Executive Summary

The origin of the Pioneer Program and the Nevada Department of Transportation's (NDOT or the Department) use of alternative project delivery began in 2008 with the approval of Public-Private Partnerships (P3) to enhance delivery of Nevada's most critical transportation infrastructure. By 2011, the Department was in the process of completing its first three Design-Build (DB) projects, providing the State another delivery method for use. In 2013, new legislation allowed the Department to use Construction Manager at Risk (CMAR) to pilot five projects around the State. Since then, the Department has improved how it develops and delivers projects, refining its approach for both traditional and alternative delivery. These Pioneer Program Guidelines (Guidelines) reflect the best practices and lessons learned from the program's 12-year history.

The Department administers innovative/alternative project delivery through the application of the Guidelines, consistent with legislative authority and applicable federal law governing the development, construction, financing, and/or maintenance of transportation facilities throughout the State. This version of the Guidelines was developed in accordance with legislative changes that occurred before July 1, 2020.

These Guidelines include information and processes that are essential for Pioneer Program implementation and consistent delivery of projects. The Department also uses the Guidelines to develop new approaches to deliver projects to Nevadans.

These Guidelines are not legislatively mandated but are intended to guide both the Department's staff and the public sector on the delivery of solicited or unsolicited proposals for the various alternative delivery methods under the Pioneer Program. In no event shall any failure by the Department to follow the processes and approaches set forth in the Guidelines give recourse to any individual or entity. The Department recognizes that every project is unique, and that certain procedures and approaches set forth in the Guidelines may not apply in all circumstances. Therefore, it is intended that the Department retain flexibility to meet the needs of a project.

These Guidelines may be periodically revised or updated as appropriate or necessary to meet the Department's mission and Pioneer Program goals. Revisions to these Guidelines may only be made at the direction of the Pioneer Program Director (PPD), in consultation with the Department Director. The Project Management Division is responsible for approved edits and updates in consultation with Administrative Services and the Legal Division.





CHAPTER 1 PIONEER PROGRAM OVERVIEW





Chapter 1 Pioneer Program Overview

Section 1.1 Introduction

The Pioneer Program is one of many tools available to the Nevada Department of Transportation (NDOT or the Department) to fulfill the Department's mission and goals and the State legislature's intent of supporting transportation infrastructure. As such, the Pioneer Program Guidelines (Guidelines) have been established to complement and further leverage available State transportation resources and funding in the most efficient and expeditious manner, all while ensuring a process that is fair and transparent, accountable and reliable, and innovative.

The Guidelines are structured to guide a practitioner considering alternative delivery (whether Department staff or the public sector) in understanding and applying a consistent methodology for identifying, financing, procuring, awarding/contracting, and implementing/administering a project. This Chapter summarizes each of the available methods and provides a brief overview of the Department's process for identifying the most appropriate method for project delivery.

Section 1.2 Project Delivery Methods and Legislative Authority

A project delivery method is a comprehensive process of assigning the contractual risks and responsibilities for designing, constructing, financing, operating, and maintaining a project. Nevada uses four methods to deliver its projects: the traditional Design-Bid-Build (DBB) method and the alternative delivery methods of Construction Manager at Risk (CMAR), Design-Build (DB), and Public-Private Partnerships (P3).

Following a brief comparison of traditional vs. alternative delivery methods, this section provides brief summaries of each alternative delivery method, including the organization, procurement, and contracting methodologies; the applicable legislative authority, and general advantages and disadvantages for each method.

1.2.1 Traditional vs. Alternative Delivery Methods

Most of today's infrastructure has been built using the traditional DBB delivery. With this delivery, the Department completes the design of the project, and then the Department competitively bids and awards a construction contract to the lowest responsive and responsible bidder.

In contrast, with alternative delivery, the procurement of the construction contractor uses techniques that are competitive in nature but do not rely on the traditional low-bid method of award. These techniques include:





- Qualifications Based Selection (QBS): This process requires that projects be advertised, and proposers ranked based on published, weighted criteria for experience, capability, availability, past performance, qualifications, and approach to the services.
- Best Value Selection (BVS): This process allows the Department to consider price proposals and other key factors (e.g., schedule, qualifications, quality, technical approach, design and construction, Alternative Technical Concepts [ATCs], safety, and management approach) in the evaluation and selection process. The inclusion of such factors allows the Department to select a proposer that best meets the project's needs and goals.

1.2.2 Construction Manager at Risk

What is CMAR?

Expanded upon in <u>Chapter 2</u>, the CMAR delivery method involves procuring a general contractor with specialized experience to serve as a construction manager (Construction Manager) who:

- 1. Assists the Department and Designer in designing the project during a Pre-Construction (design development) Phase; and,
- 2. Completes project construction if a price, as validated by an Independent Cost Estimator (ICE), is agreed upon with the Department.

Legislative Authority

The Nevada statutory and regulatory requirements and the Federal Highway Administration (FHWA) regulations that govern the CMAR process include Nevada Revised Statutes (NRS) 338.1685 to 338.16995, inclusive; Nevada Administrative Code (NAC) 338.500 to 338.640, inclusive; 23 Code of Federal Regulations (CFR) Part 635; and the FHWA/NDOT Stewardship and Oversight Agreement, as applicable. Specific application of both legislative authorities is cited throughout Chapter 2.

Organization, Procurement, and Contracting

The CMAR process follows the typical DBB process through both the Pre-Construction and Construction Phases. However, the uniqueness of CMAR is the involvement of the Construction Manager and ICE during the Pre-Construction Phase to provide constructability and estimating input into the typical design workshops, risk and innovation discussions, and construction schedule development meetings. The other uniqueness of the process is the Construction Manager's and ICE's progression of periodic milestone estimates or Opinion of Probable Construction Cost (OPCC) estimates for each major design milestone, all culminating in a Construction Guaranteed Maximum Price (GMP) bid to secure a construction contract.







Organization: Led by the Department, the CMAR process integrates a Construction Manager to work alongside the Designer in advancing design during the Pre-Construction Phase.

Procurement: Qualification-based selection via a Request for Qualifications (RFQ) (for the Designer, Construction Manager, and ICE) and interview (for the Construction Manager to determine final selection rankings).

Contracting:

- Pre-Construction Services Agreement (PCSA) for the Designer, Construction Manager, and ICE during the Pre-Construction/Design Phase.
- A construction contract that includes a fixed-price or the cost of the work, plus a fee, with a GMP during the Construction Phase.

Advantages and Disadvantages

Advantages

- Cost certainty, risk reduction, and constructability input from the early integration of a Construction Manager and ICE.
- Leveraging early work packages and ability to procure long-lead items to accelerate project delivery and mitigate schedule risks in the Construction Phase.
- Potential reduction of design rework and better understanding of project unknowns.
- Cost savings through the integration of contractor-generated value and innovation early in the design process.
- Allows the Department control of design decisions while improving collaboration and the interaction with third parties.

Disadvantages

- Extra costs for contractor involvement in the Pre-Construction Phase.
- No competitive bidding leading to no assurance that the Department procured the lowest price.
- Potential lack of leverage with the Construction Manager when negotiating the Construction Phase.
- May be difficult to justify the public's perception of cost reasonableness and Construction Manager selection.
- GMP negotiations and reconciliation may delay construction Notice to Proceed (NTP).

1.2.3 Design-Build

What is Design-Build?

Detailed further in <u>Chapter 3</u>, the DB delivery method involves procuring a single entity (a Design-Builder) to complete both the design and construction work for a project. Based on the Department's advancement of a preliminary design and its development of contractual performance specifications and allocation of project risks, the Design-Builder





designs and builds the project in compliance with the contract requirements, all while integrating innovative solutions consistent with the Department's goals and objectives.

Legislative Authority

The Nevada statutory and regulatory requirements and FHWA regulations that govern the DB process include NRS 408.3875 to 408.3888, inclusive; 23 U.S.C. Part 112(b)(3) and 23 CFR Part 636; and the FHWA/NDOT Stewardship and Oversight Agreement, as applicable. Specific application of both legislative authorities is cited throughout Chapter 3.

Organization, Procurement, and Contracting

The DB process commences through development and issuance of an RFQ and Request for Proposal (RFP) for a Design-Builder. After issuance of the final RFP, a proposer is selected, and a contract executed, with a Design-Builder to provide a single entity leading both design and construction of the project.

Organization: Overseen by the Department (and often supported by a program manager), the DB process involves a Design-Builder to design and construct the work.

Procurement: Best-value selection via a two-step procurement process:

- 1. An RFQ to shortlist the proposers.
- 2. An RFP to determine the best-value proposer considering a technical proposal and price proposal.

Contracting: A fixed-price (lump sum) design and construction contract with the Design-Builder.

Advantages and Disadvantages

Advantages

- Determination of a fair price due to competitive bidding and cost certainty because of the Design-Builder's acceptance of risks associated with design, quantities, constructability, etc.
- Streamlining and enhancing coordination through single point of responsibility for design and construction.
- Integration of innovation, quality, and constructability early into the design and construction processes.
- Accelerates delivery by fast-tracking design and construction in parallel and through phased packages.
- Clearly allocates risk to both the Department and Design-Builder in the contract documents.







Disadvantages

- The Department has less control regarding design decisions.
- Higher procurement costs and stipends for proposers.
- Potentially higher costs within the Design-Builder's bid associated with assigned risk.
- Considerable time and resources needed to develop and issue the RFQ and RFP, evaluate Statements of Qualifications (SOQ) and proposals, and administer the contract.

1.2.4 Public-Private Partnerships

What is a Public-Private Partnership?

Expanded upon in <u>Chapter 4</u>, the P3 delivery method typically involves procuring a single entity (a P3 Developer) to complete the design, construction, finance, operations, and maintenance of a project. Based on the Department's advancement of a preliminary design and its development of contractual performance specifications and allocation of project risks, the P3 Developer typically designs, builds, finances, operates, and maintains the project in compliance with the contract requirements, all while integrating innovative solutions consistent with the Department's goals and objectives. In return for the facilities and services provided, the Department typically pays the P3 Developer periodically for making the facility available to the traveling public, for as long as the P3 Developer adheres to the performance-based technical requirements.

Legislative Authority

The Nevada statutory and regulatory requirements and FHWA regulations that govern the P3 process include NRS 408.5471 to 408.549 and NAC 408.650 to 408.698, inclusive, if received as an unsolicited proposal; NRS 338.158 to 338.1602 inclusive, if the location of the project is in counties whose population is 700,000 or more (currently Clark County); 23 CFR Part 636; and the FHWA/NDOT Stewardship and Oversight Agreement, as applicable. Specific application of both legislative authorities is cited throughout Chapter 4.

Organization, Procurement, and Contracting

The P3 process commences through development and issuance of an RFQ and RFP for a P3 Developer. After issuance of the final RFP, a proposer is selected, and a contract is executed with a P3 Developer to provide a single entity leading design, construction, financing, operations, and maintenance of the project. The P3 Developer procures a Design-Builder to perform design and construction that mirrors the contract between the P3 Developer and the Department.

Organization: The P3 Developer is responsible for all aspects of project delivery, financing, and operations over the term of the P3 agreement. This organizational structure optimizes the risk transfer of long-term







performance of a facility, as the P3 Developer is responsible for defects of the construction of the facility during the Operations & Maintenance (O&M) period.

Procurement: Best-value selection via a two-step procurement process:

- 1. An RFQ to shortlist the proposers.
- 2. An RFP to determine the best-value proposer considering a technical proposal that typically includes design, construction, operations, and maintenance and a price proposal that includes financing.

Contracting: Typically includes maximum annual price for design, construction, financing, operations, and maintenance contract with the P3 Developer.

Advantages and Disadvantages

Advantages

- Avoids inflation of project costs because of delays until the Department can fund and/or finance the project.
- Accelerates project delivery through private financing compared to traditional funding and financing.
- Allows for the transfer of risk if the project is technically complex or not within the expertise of the Department, provided they are adequately rewarded and penalized for success/failure through the P3 agreement.
- Through performance-based technical requirements, incentivizes the private sector to optimize innovation and value in the design, construction, operations, and maintenance, thereby improving life cycle costs and project quality.

Disadvantages

- Best-value selection for the costs and risks transferred may not result in the lowest up-front project cost.
- Considerable time and resources needed to develop and issue the RFQ and RFP, evaluate SOQs and proposals, and administer the design, construction, maintenance, and operational activities may limit innovation as the P3 Developer may not have the ability, comfort, or time to prepare a response to an RFP or may not want to introduce new construction methods or techniques to avoid taking on risk.
- The Department may incur unexpected project results because of the difficulty in scoping the unique issues and complexities of the project.

1.2.5 Unsolicited Proposals

What is an Unsolicited Proposal?

Expanded upon in <u>Chapter 5</u>, an Unsolicited Proposal (UP) is not a standalone delivery method. Instead, it provides a separate conduit for private entities to identify and propose projects that may provide significant benefits to the Department.

A UP is a written proposal made by a private party for a new or innovative idea that includes the development and delivery of a project. The proposal is made at the initiative





of the private firm, rather than in response to a procurement issued by the Department for the purpose of obtaining a contract to complete the work. If approved, a UP would typically result in a DBB, CMAR, DB, or P3 project delivery method.

The Department prefers to use a solicited procurement process because it involves effective planning, budgeting, and procurement processes and would encourage competition, while providing a more predictable outcome for the Department and the industry participants.

Legislative Authority

In 2003, the Nevada State Legislature adopted statutes related to the development of transportation facilities by private entities. These statutory provisions (NRS 408.5471 through 408.549, inclusive) authorize UPs in which the private sector may assume a greater role in the development, financing, design, construction, operation, and/or maintenance of a transportation facility. In 2010, Chapter 408 of the NAC was amended to add regulations related to competitive procurements initiated by UPs. These regulations are set forth in NAC 408.650 to 408.698, inclusive. In 2017, Senate Bill 448 established NRS 338.158 to 338.1602, inclusive, giving special authority for projects in counties with populations of 700,000 or more (currently Clark County).

Evaluating an Unsolicited Proposal

The Department evaluates UPs to determine if they meet the statutory requirements, application requirements, relevant evaluation criteria, and whether the UP's merits and public benefits outweigh the costs and potential risks.

If the UP is deemed to be viable and one that the Department wishes to pursue, the Department may solicit for competing proposals or alternatively negotiate on a sole source basis with the private entity that submitted the UP. Once the contract is executed, the project would be delivered using the most appropriate project delivery method.

The Department's detailed process for evaluating UPs consistent with the relevant statutory requirements and regulations is further described in Chapter 5.

1.2.6 Special Experimental Projects No. 14

Since the introduction of the Special Experimental Projects (SEP) program in 1990, state agencies can propose, use, and evaluate new innovative contracting techniques if approved by the FHWA. This program has led to a variety of FHWA-approved alternative delivery techniques.

The FHWA allows State Departments of Transportation to utilize non-traditional contracting techniques, which are competitive in nature but do not fully comply with the requirements in 23 United States Code. Specific types of federal-aid construction contracts that utilize a method of award other than the lowest responsive bid must be evaluated under FHWA's Special Experimental Project No. 14 (SEP-14) "Innovative Contracting."

Cost-plus-time bidding, lane rental, warranties, alternate pavement type bidding, Construction Manager/General Contractor (CM/GC) (or CMAR) Project Delivery, and ATCs





on DB projects are techniques that the FHWA has deemed suitable for operational use and do not require a SEP-14.

FHWA also has established regulations for DB contracting as part of 23 CFR Part 636. Only deviations from 23 CFR 636 currently require a SEP-14 work plan and approval.

1.2.7 Special Experimental Projects No. 15

The FHWA established the SEP No. 15 (SEP-15) program to encourage tests and experimentation in the entire development process for transportation projects. SEP-15 is aimed specifically at increased project management flexibility, more innovation, improved efficiency, timely project implementation, and new revenue streams. The SEP-15 process would generally apply if the Department wishes to deliver a P3 project and must also comply with 23 CFR Part 636, as applicable. The approval of a SEP-15 application is a discretionary action by FHWA. If approved, the Department and FHWA would enter into an Early Development Agreement (EDA) with respect to the "experimental" elements (deviations) that set out the approval requirements and conditions (and constraints), as well as any ongoing reporting requirements.

Section 1.3 Project Delivery Workflow

The typical project delivery process follows the workflow illustrated on Figure 1-1.



Figure 1-1: Typical Project Delivery Process

A brief description of each phase is as follows:

- Identification Phase is when the Department uses the established Project Delivery Selection Approach (PDSA) (<u>Appendix C</u>), as described in Section 1.4 of this Chapter, to identify the optimal delivery method for a project.
- Solicitation Phase is the first phase in the procurement process. Primary elements of the Solicitation Phase include advancing pre-procurement project development and developing applicable requests for qualification or proposal packages to procure a Service Provider or Contractor.
- **Evaluation Phase** is the second phase in the procurement process that evaluates the SOQs or proposals submitted. The Evaluation Phase concludes with the selection of the proposer that is most qualified or provides the best value based on the criteria in the request.





- Award Phase is the final phase in the procurement process that involves contract negotiations and award to the selected Service Provider or Contractor by the Department and Nevada Transportation Board (Board).
- Implementation/Contract Administration Phase often includes at least the Department's and selected proposer's involvement in the design and construction aspects of a project.

Section 1.4 Selecting a Project Delivery Method: Identification Phase

The intent of the Identification Phase is to evaluate, select, and obtain approval for an appropriate project delivery method for projects solicited by the Department. Unsolicited Proposals and the corresponding Identification Phase are described in Chapter 5.

1.4.1 Identification Phase Roles, Responsibilities, and Organization

The Department has established roles and committees to oversee and complete the Identification Phase. Figure 1-2 illustrates the organizational structure for advancing the Identification Phase for a project.



Figure 1-2: Identification Phase Organizational Structure





Pioneer Program Director (Deputy Director/Chief Engineer)

The Pioneer Program Director (PPD) is responsible for reviewing all recommendations and key decisions associated with the Identification Phase to ensure consistency with the intent of the program and the goals and objectives of the Department.

The PPD oversees all activities related to the delivery method selection process, including ensuring compliance with current statutes and regulations. For P3 projects, the PPD's responsibilities may include liaising with other public agencies and overseeing public relations, stakeholder coordination, and informational outreach to the public and local, state, and federal agencies.

The PPD may weigh into the process at the appropriate times and, ultimately, either approves or rejects the recommended delivery method.

Project Management Team

The Project Manager (PM) establishes and leads the Project Management Team (PMT), which supports all aspects of the Identification Phase.

The PMT is comprised of the Project Delivery Selection Committee (PDSC) and an Advisory Team, and the PMT may engage qualified external Service Providers to support the PMT's efforts (especially for potential P3 projects). The PM also ensures that appropriate internal Department representatives integrate external stakeholders (e.g., affected local agencies, FHWA, the State Attorney General's Office, the State Controller's Office, and the State Treasurer's Office) into the Identification Phase, as appropriate.

The PMT is responsible for managing and overseeing the Identification Phase process, including the research and development of project information necessary to support the Project Delivery Selection Approach (PDSA) and Value for Money (VfM) analysis, if appropriate. The PMT is comprised of various roles as described below.

Pioneer Program Manager (Chief, Project Management)

The Pioneer Program Manager (PPM) is responsible for overseeing the Identification Phase and assigning a PM to evaluate a candidate project for the most appropriate delivery method. Additionally, the PPM:

- Provides recommendations on the composition of the PDSC and Advisory Team.
- Coordinates with the PMT and PDSC to make decisions on issues throughout the Identification Phase.
- Ensures that appropriate internal Department representatives integrate external stakeholders (such as affected state and local agencies, FHWA, etc.) into the process, as appropriate.

Assistant Chief, Project Management

The Assistant Chief, Project Management is responsible for supporting the PPM in providing oversight for the process and coordinating with the PMT to facilitate decisions, provide direction, and recommend changes to the PPM.





Project Manager

The PM manages the Identification Phase processes to ensure the appropriate delivery method is selected and approved. The PM is responsible for developing and managing scope, schedule, budget, staffing requirements, and project risks and reporting project status and performance to the PPM. This work includes:

- Recommending PDSC and Advisory Team members and coordinating approvals with the PPM.
- Maintaining the workflow and activities necessary to complete the process.
- Preparing and submitting the PDSA to the PPM and PPD.
- Coordinating the development of information necessary to support the PDSA and other aspects of the Identification Phase as required.
- Procuring the support of Service Providers, as required.

Project Delivery Selection Committee

The PDSC contributes to the development of project information to support the project delivery selection and participates in the consensus workshop to determine the most appropriate delivery method. The PDSC is composed of Department representatives and may include representatives of affected local, state, and federal agencies, each having expertise to support Identification Phase activities. At the discretion of the PM, the Department may engage Service Providers to support the PDSC's efforts.

Advisory Team

The Advisory Team is comprised of the subject matter, technical, and administrative experts within the Department, from other public agencies, and potentially other stakeholders. Key personnel (typically at the management or supervisory level) from the appropriate groups are invited to participate in the process, as required.

Specific roles are dependent on the project needs, but generally staff may support the following:

- Project identification and scoping effort.
- The identification of risks, opportunities, and challenges.
- The development of preliminary schedules and cost estimates or other information and activities to facilitate the process.

Service Providers

Service Providers may provide support in the preparation of the documents and/or administration of the Identification Phase as directed by the PM. Services may include procurement, technical, financial, and administrative support.

1.4.2 Identification Phase Process

Identifying the right delivery method for a project depends upon specific characteristics, goals, and objectives identified for that project, as well as considerations of Department





program delivery objectives and the impacts of a given delivery method on Departmentmanaged resources.





Figure 1-3: Identification Phase Process (Solicited Projects)

1.4.2.1 Establishing the Project Delivery Selection Committee

The PM and PPM identify, establish, and lead a PDSC in conducting the evaluation and selection of the most suitable delivery method for a project. The PDSC composition and roles are described in <u>Section 1.4.1</u>.

1.4.2.2 Understanding the Project

The PM, with assistance from the PMT, is responsible for researching and understanding the various elements of the project being evaluated. The following project-specific elements typically provide the PDSC with the necessary information to appropriately use the PDSA:

Project location and description, including purpose and need.





- Estimated project cost range (total).
- National Environmental Policy Act (NEPA) and right-of-way (ROW) status.
- Desired project delivery date (year and quarter) and major milestones: NTP, start of design, start of construction, and substantial completion of construction.
- Major project features, such as pavement, bridge, sound barriers, etc.
- Project scope/project status.
- Stakeholders.
- Major challenges.
- Sources of risk and potential innovation.
- Unique technical requirements and/or complexity.

1.4.2.3 Defining the Project Goals, Challenges, and Opportunities

The PM, with assistance from the PMT and input from the PPD, must clearly define and agree on measurable project goals, challenges, and opportunities.

Establishing clear and concise project goals:

- Is essential to the selection of the appropriate method of delivery.
- Influences each phase of project development.
- Communicates the Department's values for the project and should influence proposers in their approach, team formation, and proposal content.
- Helps to ensure continuity in the procurement process.
- Guides the decision-making process throughout a project's life cycle.

Project goals may address schedule, quality, risk allocation, scope, cost/financial considerations, or other project-specific issues. The established goals would then be correlated to the perceived benefits of using a particular delivery method.

What follows are some generic examples of transportation project goals. The goals for transportation projects generally are similar. Nevertheless, the goals must be considered specifically for each project and remain consistent over the life of the project. Additionally, it is good practice to limit the number of goals to be between three and five goals.

Schedule

- Minimize the project delivery time.
- Complete the project before a specified date.
- Make the project fully operational prior to a specified date.

Cost

- Minimize the project cost.
- Maximize the project budget.





- Complete the project on budget.
- Maximize the project scope and improvements within the project budget.

Quality

- Meet or exceed the project requirements.
- Meet or exceed Maintenance of Traffic (MOT) requirements.
- Provide a design and construction that minimizes project risks.
- Provide the lowest life cycle costs.
- Provide the most highly qualified organization to perform the work.
- Provide high-quality design and construction that best addresses the complexity of the project.
- Provide an aesthetically pleasing project.

Function

- Maximize the life cycle performance of the project.
- Maximize capacity and mobility improvements.
- Provide innovative solutions to the complex project problems.
- Minimize inconvenience to the traveling public during construction.
- Maximize safety of workers and the traveling public during construction.

However, the more specific the PM can define a project's goals, the greater an opportunity there is for the PDSC to apply the PDSA and better define and communicate the project's intent to the private sector/proposers.

1.4.2.4 Evaluating the Appropriateness of a Delivery Method

The Department, as vetted through FHWA, has developed five initial screening criteria for selecting the most appropriate project delivery method. The following offers a brief overview of each criterion.

- Cost Impacts: This criterion considers aspects of project cost with respect to previously defined budget goals (e.g., the ability of the given delivery method to handle budget restrictions, identify early and precise cost estimates, and control of all project costs not just construction).
- Schedule Impacts: This criterion considers aspects of a project's schedule, including the ability to shorten the schedule and the opportunity to control and prevent time growth.
- **Opportunity to Manage Risk**: This criterion considers a project's level of risk during various phases of development and considers how each delivery method handles risks differently in its ability to identify, allocate, quantify, and mitigate risks.
- **Complexity of Design and Construction Phasing**: This criterion considers aspects of a project that are unique or more complex than normally encountered (e.g.,





uniqueness of design, MOT, phasing of the project, constructability, location of the project, unknowns). The factors may be associated with the unique project scope, goals, and objectives specified by the Department.

 Opportunity for Innovation: This criterion considers the opportunity for encouraging and integrating innovation for new designs, products, technologies, project approaches, and construction techniques to achieve the project's goals.

Each of these criteria, along with other supporting documentation, are included in the PDSA, which is a Department tool for evaluating a solicited project's suitability for delivery under the DBB, DB, or CMAR delivery methods. In short, the <u>PDSA</u> provides a systematic approach to understanding the delivery options; defining project goals, challenges, and opportunities; evaluating potential delivery methods through group consensus; documenting the results; and recommending the appropriate delivery method for the project.

The PDSA expands upon a list of typical advantages and disadvantages associated with each delivery method to be considered when evaluating a method's appropriateness for a specific project. Based on an understanding of these advantages and disadvantages, as well as the project's goals, challenges, opportunities, risks, and complexities, the PDSC forms a consensus opinion of the most appropriate method for each of the five criteria.

The PDSC and PM then formulate an initial recommendation, compiling all supporting data for a recommended action. If the initial recommendation is DB delivery, the Department may only consider P3 delivery as an option for projects in Clark County. There may also be other factors that could lead to the consideration of P3 delivery (as described in Chapter 4). Should the PM and PDSC determine that P3 delivery would be beneficial, additional steps are needed to evaluate the feasibility of this approach.

Evaluating Public-Private Partnership Feasibility: Additional Steps To begin evaluating the feasibility of the P3 method, the first step is for the PDSC to recommend further evaluation of this option to the PPM.

Approval by the PPM and PPD is required to proceed with subsequent steps, namely the P3 feasibility process. If the results indicate that P3 delivery may provide a good value to the Department, the PDSA is finalized and supporting information (including the P3 feasibility results) compiled for recommended action. If the analysis does not favor P3 delivery, the PDSC is likely to proceed with their initial recommendation for delivery.

1.4.2.5 Compiling the Results and Recommending a Delivery Method

The PM summarizes the reasons and justification for the selection of the specific delivery method and offers the justification for arriving at a recommended delivery method. The PM, with the assistance of the PMT, documents the recommended delivery method using the *Project Delivery Method Recommendation Form* in the PDSA and includes the applicable backup.

1.4.2.6 Project Delivery Selection Approvals

The PM submits the delivery method recommendation and applicable backup to the PPM. The PPM considers factors such as program-level considerations, the number of projects





to be delivered under a given method at a given time, the capacity of Department staffing to support project procurement and execution, FHWA input (as applicable), current market conditions, and other factors when reviewing the recommendation.

The PPM then submits this information to the Attorney General's Office, as necessary, for review and comment. The PPM revises the recommendation based on the comments received before providing the submittal to the PPD for approval.

The PPD reviews and either approves or rejects the project for the recommended delivery method. If the PPD rejects the delivery method recommendation, then the PM notifies the project sponsor of this decision in writing.

If the PPD approves the recommended project delivery method, the PM and the PPM obtain FHWA approval in accordance with the federal requirements (and the FHWA/NDOT Stewardship and Oversight Agreement) for the P3 selected method only. For DB and P3 project delivery, the Department presents the selected delivery method to the Board for approval. As shown on Figure 1-3, CMAR and DBB selected projects do not require FHWA and/or Board approval.

Once all the appropriate approvals are provided, the Department advances the project to the Solicitation Phase of the chosen delivery method.

Section 1.5 Reservation of Rights

Throughout each Phase, the Department reserves all rights at law, in equity, and as set forth in the procurement documents for a project, as applicable. The Department reserves, without limitation and at any time, to:

- Modify or cancel procurements or modify procurement schedules.
- Reject any and all proposals, including a UP.
- Make modifications to or advertise the project as proposed in the UP.
- Require the entity that submitted a UP to submit in response to a Request for Information (RFI), RFQ, and/or RFP.
- Terminate evaluations of any and all proposals.
- Suspend, discontinue, or terminate project negotiations with any proposer.
- Request or obtain additional information from any proposer.
- Issue addenda or cancel a procurement process.
- Terminate the screening process if, at any time, the Department determines that the proposed project is not a good candidate for further analysis or development.
- Revise, supplement, or withdraw all or any part of these Guidelines.





CHAPTER 2 CONSTRUCTION MANAGER AT RISK





Chapter 2 Construction Manager at Risk

Section 2.1 Overview of Delivery Process

Construction Manager at Risk (CMAR) is an alternative contracting method that involves a general contractor acting as a construction manager (Construction Manager) who provides cost, schedule, value analysis, and input in the Pre-Construction (design development) Phase of a project and then acts as the general contractor to self-perform, subcontract, and manage the Construction of a project.

2.1.1 Project Delivery Workflow

The typical CMAR process follows the workflow illustrated on Figure 2-1. <u>Appendix D</u> provides a more detailed graphic example of the activities, milestones, and decision points involved in the process.



Figure 2-1: Construction Manager at Risk Project Delivery Process

A brief description of each phase is as follows:

- Identification Phase is when the Department uses the established Project Delivery Selection Approach (PDSA), as described in <u>Section 1.4.2</u>, to identify the optimal delivery method for a project.
- <u>Solicitation Phase</u> is the first phase in the procurement process. Primary elements of the Solicitation Phase include advancing pre-procurement project development, procuring or identifying a Designer and Independent Cost Estimator (ICE), and developing a Request for Proposal (RFP) package to procure a Construction Manager.
- Evaluation Phase is the second phase in the procurement process, during which proposals submitted in response to the RFP are evaluated. The Evaluation Phase concludes with the selection of a responsive proposal best qualified to meet the technical and interview criteria listed in the RFP.
- <u>Award Phase</u> is the final phase in the procurement process that involves contract negotiations and award to the Construction Manager by the Nevada Department of Transportation's (NDOT or the Department) and Nevada Transportation Board (Board) of Directors.





Implementation/Contract Administration Phase includes two sub-phases: a <u>Pre-Construction</u> Phase and a <u>Construction Phase</u>.

As summarized on Figure 2-2, the ultimate outcome of the procurement process is to evaluate, select, and award a project to the most qualified proposer, who then provides CMAR services during the Pre-Construction Phase. The goal of the Pre-Construction Phase is for the Department and Construction Manager to establish a provable and agreed upon Guaranteed Maximum Price (GMP) for award of a contract to construct the project.



Figure 2-2: Construction Manager at Risk Procurement Process

Section 2.2 Procurement Process: Solicitation Phase

The intent of the Solicitation Phase is to solicit a Construction Manager to successfully apply the CMAR delivery method for a project. Concurrent with this process, the Department procures or identifies both the ICE and Designer (either in-house or consultant) in accordance with the *Project Management Guidelines* and standard procurement processes. The release of the RFPs for these procurements should be scheduled so that the Service Providers are under contract and ready to proceed with work when the Project Manager (PM) assembles the rest of the team. This would allow the entire team to be engaged concurrently.

2.2.1 Solicitation Phase Roles, Responsibilities, and Organization

The Department has established a number of roles and committees to develop and evaluate the RFP. Figure 2-3 illustrates the organizational structure for advancing the procurement process.







Figure 2-3: Procurement Process Organizational Structure: Solicitation and Evaluation

As shown, oversight of the procurement process is provided by the Board, the Director (typically acting as the Selection Official), and the Pioneer Program Director (PPD). The responsibilities for each role depicted on Figure 2-3 are as follows.

Selection Official

The Selection Official (Department Director or Deputy Director as designated) is responsible for:

- Overseeing the initial appointments and substitutions for the CMAR RFP Evaluation Panel, the Procurement Administration Team (PAT), and Observers.
- Approving the process and plan for evaluating the proposals.
- Determining the participation levels of individuals that may have a potential conflict of interest, including ending or prohibiting an individual's participation in the evaluation and selection process or imposing mitigation for such conflicts or relationships to ensure a fair evaluation and shortlisting process.

Pioneer Program Director (Deputy Director/Chief Engineer)

 The PPD is responsible for reviewing all recommendations and key decisions associated with the Solicitation Phase to ensure consistency with the intent of the program and the goals and objectives of the Department.

Project Management Team

The Project Management Team (PMT) is responsible for overseeing development of the CMAR procurement documents, procuring and/or identifying the ICE and Designer, and working with the Designer to initiate certain design development activities. The PMT is comprised of various roles as described below.





Pioneer Program Manager (Chief, Project Management) The Pioneer Program Manager (PPM) is responsible for:

- Identifying and requesting appointment of the Selection Official.
- Appointing the PM.
- Providing recommendations on the composition of the Evaluation Panel.
- Coordinating with the members of the PMT and Evaluation Panel to make decisions on issues throughout the Solicitation Phase and the overall procurement process.
- Ensuring that appropriate internal Department representatives integrate external stakeholders (such as affected local agencies, the Federal Highway Administration [FHWA], the State Controller's Office, and the State Treasurer's Office) into the Solicitation Phase and overall procurement process, as appropriate.

Assistant Chief, Project Management

The Assistant Chief, Project Management is responsible for supporting the PPM in providing oversight for the procurement process and coordinating with the PMT to facilitate decisions, provide direction, and recommend changes to the PPM.

Project Manager

The PM oversees the management functions of the Solicitation Phase, in addition to the development of the procurement documents for a Construction Manager, ICE, and Designer (if applicable). The PM is responsible for:

- Recommending Evaluation Panel committee members and coordinating approvals with the Selection Official and PPM.
- Maintaining the procurement workflow and activities listed in the project schedule.
- Overseeing preparation of the draft Pre-Construction Services Agreement (PCSA) and associated Scope of Services for the Construction Manager.
- Developing a Project Management Plan (PMP) to guide the procurement process.

Procurement Administration Team

The PAT is comprised of members from Agreement Services, the Department's legal counsel, and others identified by the PPM. The PAT is responsible for:

- Overseeing administration of the procurement process to ensure confidentiality, consistency, and fairness.
- Serving as a point of contact in the event a member of the team has questions or encounters issues relative to the evaluation and selection process.
- Requesting additional information or clarification from proposers upon direction from the Selection Official.
- Ensuring timely progress of the evaluations, leading coordination for any consensus meeting(s) or re-evaluations(s), and ensuring appropriate records are prepared and maintained (e.g., consensus/debriefing comments).





 Controlling all procurement documents, including confidentiality statements, for the entire procurement process.

Service Providers

Service Providers may provide support in the preparation of the procurement documents and/or administration of the procurement process as directed by the PM. Services may include procurement, technical, financial, and administrative support.

Evaluation Panel

The Evaluation Panel helps in the preparation of the RFP, including developing evaluation factors in accordance with Nevada Revised Statutes (NRS) 338.1692 and 338.1693. The Evaluation Panel is composed of Department representatives and may include representatives of affected local, state, and federal agencies, each having expertise to support Solicitation Phase activities. At the discretion of the PM, the Department may engage Service Providers to support the Evaluation Panel's efforts.

Observers

Observers may attend to observe the procurement process. Observers are appointed by the Selection Official and may consist of representatives from the Department's legal counsel, FHWA, the Project Management Division, and/or Agreement Services.

The evaluation roles of the PMT and Evaluation Panel are more fully described in <u>Section 2.3.1</u>.

2.2.1.1 Assembling the Team

Once a project is identified and approved for CMAR delivery, the Department assembles a team that includes the PMT, Evaluation Panel, and other Department staff to advance the procurement and technical aspects of the project during the Solicitation Phase.

Confirmation of the Selection Official is the initial step. With input from the PM, the PPM recommends committee members for the PMT, Evaluation Panel, and Observers related to the CMAR RFP. Engagement could include other Department staff and Service Providers (i.e., the Designer) to support design development and the ICE to provide independent cost estimation services.

2.2.2 Project Development

During the Solicitation Phase, the Department develops the procurement documents and advances design activities in parallel with procuring the Construction Manager.

2.2.2.1 Preparing a Project Management Plan

The PM, with support from the team, is to prepare a PMP at the beginning of the Solicitation Phase to establish the overall processes and objectives for a project. This PMP also identifies the roles and responsibilities of the team during the procurement process (including contact information and organizational charts), the project's risks and challenges, the procurement and overall project schedule, and the project budget at the time of publication. The PMP is a living document, and the PM is to update the PMP throughout the procurement process and the Implementation/Contract Administration




Phase, as needed. The PMP is to be endorsed by the PPD, PPM, and the Selection Official.

2.2.2.2 Developing the Project's Scope of Services

The PM, with support from the team, is to develop the project's Scope of Services prior to preparing any of the procurement documents for the Construction Manager.

Intent and Use

The Scope of Services defines the scope of work for the Construction Manager and is referenced as an appendix to the PCSA. The general Scope of Services is to be communicated to the Evaluation Panel as a critical reference document to be understood prior to the evaluation and selection process.

General Content

In general, the Scope of Services describes the project background and the defined elements of the Pre-Construction Phase. The Scope of Services also details:

- The team and third-party stakeholders.
- Project-specific goals and a project description (including established baseline configuration and design criteria).
- An anticipated pre-construction project schedule.

Considerations and Timing

It is important to consider when to procure and incorporate a Construction Manager into the larger team. Considerations should include how to maximize Construction Manager input on the design. Notably, this involves the Construction Manager's input regarding innovative concepts based on its means and methods and constructability reviews that may affect:

- Identification and mitigation of risk.
- Advancement of the National Environmental Policy Act (NEPA) and the right-of-way (ROW) acquisition process.
- Establishment of the conceptual design/footprint for the project (i.e., vertical and horizontal).

2.2.2.3 Creating and Updating a Project Schedule

The PM, in coordination with the team, is to develop and maintain a project schedule to document all activities related to the project. Typical schedule milestones for the Solicitation Phase include:

- RFP release.
- Proposal due date.
- Shortlist announcement.
- Interview.
- Notice to Proceed (NTP) for Construction Manager during the Pre-Construction Phase.





The PM leads periodic schedule status meetings, or when significant changes occur, as defined in the PMP. The PM coordinates any recovery schedules to accommodate potential delays with other team members.

2.2.3 Preparing and Issuing a Request for Proposal

The purpose of the RFP is to solicit a Construction Manager for CMAR-delivered projects through evaluating a proposer's qualifications that may include capabilities, organizational structure, firm experience, key personnel experience, and approach.

Figure 2-4 illustrates the Solicitation Phase process, which is detailed further in the following sections.



Figure 2-4: Construction Manager at Risk Solicitation Phase Process

2.2.3.1 Issuing a Request for Letter of Interest

The purpose of a Request for Letter of Interest (RLOI) is to gauge potential interest and provide early industry notification of a project to allow prospective proposers to begin teaming arrangements, financial arrangements, and preliminary investigative work.

Preparation and Review

The RLOI is an optional process during the Solicitation Phase. The PPM may request the use of an RLOI. If requested, the PM oversees the preparation of the RLOI, which is reviewed and distributed by the Agreement Service members of the PAT.

Content and Time Frame for Response

The RLOI content may include the general project objectives, location, schedule, estimated budget, and scope. The time frame for responding to the RLOI is at the sole discretion of the PM.





2.2.3.2 Composing a Construction Manager at Risk Request for Proposal

Prepared by the PM and Evaluation Panel in accordance with the requirements of NRS 338.1692, the RFP provides information for potential proposers to understand the project and provide proposals demonstrating that they are qualified to deliver the project consistent with the Department's goals.

Table 2-1 lists the typical components/contents of an RFP document. Key elements of the RFP are described in subsequent sections.

Fable 2-1: Constructio	n Manager at	Risk Request fo	or Proposal Document	Contents
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Introduction and General Information					
Provides general overview of the CMAR delivery method. Key elements include:					
 Overview of the RFP for CMAR Selection 	 Required Percentage of Work 				
Project Description and Schedule	 Pre-Qualification Requirements 				
 Project Funding and Estimated Construction Costs 	 Form of the PCSA 				
 Organizational Conflicts and Ineligible Firms 	 DBE Requirements 				
 Project Definitions 	 Form of the Construction Contract 				
Request for Proposals Procedures					
Describes the specific RFP procedures. Key elements include:					
 Instructions and Conditions 	 Department Rights 				
 Procurement Schedule 	 Publication of the Proposal 				
 Communication, Questions, and Changes to the RFP 	 Protest Conditions and Procedure 				
Selection Process					
Describes the various evaluation and selection phases and scoring methodology. Key elements include:					
 Responsiveness and Pass/Fail Requirements 	 Interviews Evaluation Factors 				
Evaluation and Shortlisting Process	 Award and Negotiations 				
Proposal Contents and Evaluation Factors					
Includes the Instructions to Proposers for sub	Includes the Instructions to Proposers for submitting a proposal. Key elements include:				
 Instructions to Proposers (format, page limit, etc.) 	 Interview Evaluation Factors 				
 Required Responses, Documents, and Forms 	 Bidder's Preference Requirements (if applicable) 				
 Proposal Evaluation Factors 	 Construction Manager Fee (if used) 				
Appendix: Scope of Work					
Details project background details and elements of work (namely for the Construction Manager). Key elements include:					
 Project Description (including environmental and 	Contract Schedule and Project Work Duration				
design status and risks)	 Scope of Services Tasks 				
 Project Goals Project Team Members and Third Party Stakeholders 	 Open-Book Estimating Guidance Requirements (if used) 				
Uner Appendices					
Attestation Forms	 Abbreviations and Definitions 				
Other Required Forms (including DBE, Buy America,	 Proposal Requirement Checklist 				
Forms)	Form of the PCSA				





Typical Proposal and Interview Evaluation Factors

Proposal evaluation factors must relate to the proposer's qualifications and approach to successfully execute the project. Interview evaluation factors must relate to a shortlisted proposer's innovation and ability to relate its approach to the project goals and its role in the CMAR process.

Past proposal and interview evaluation factors have included:

- Proposer team/organization.
- Project approach.
- Past project innovation and successes.
- Presentation and interview Q&A and/or team challenge.
- Construction management fee.
- Bidder's preference for projects that do not include federal financial participation consistent with NRS 338.1693.

Disadvantaged Business Enterprise Goals

Every CMAR project is reviewed for Disadvantaged Business Enterprise (DBE) subcontracting possibilities for the Pre-Construction and Construction Phases. The PM is to consult with the Department's Contract Compliance as early in the process as possible to evaluate and set percentage goals for the dollar value related to both the PCSA (if applicable) and the construction contract. If there is a percentage goal or dollar value assigned to the Pre-Construction Phase, the PM is to include this information in the CMAR RFP, the Scope of Services, and the PCSA.

2.2.3.3 Developing a Construction Manager at Risk Request for Proposals Evaluation & Selection Plan

Prepared by the PM and Evaluation Panel, the purpose of the RFP Evaluation and Selection (E&S) Plan is to establish a disciplined, fair, and uniformed approach for evaluating and ranking each proposal. Additionally, the RFP E&S Plan and its supporting materials are to align the Evaluation Panel by providing guidance on the process/criteria used when evaluating each proposal.

General Contents of the Plan

The RFP E&S Plan describes:

- The proposal and interview evaluation and ranking process and the general procurement rules, including issues related to confidentiality and conflicts of interest.
- The Evaluation Panel's organization, functions, general procedures, roles and responsibilities, and schedule.
- Evaluation criteria (from the CMAR RFP).

Review and Approval of the Plan

The PPM is to review, and the Selection Official is to approve, the RFP E&S Plan prior to issuance of the CMAR RFP.





2.2.3.4 Issuing a Construction Manager at Risk Request for Proposal

In accordance with NRS 338.1692, the Department is to issue a CMAR RFP that includes the relative content and appendices described above.

Internal Review and Approval

Prior to issuance of an RFP, the Department conducts extensive internal, crossdiscipline reviews with its technical leads, internal legal counsel, Agreement Services/PAT members, and Service Providers (as applicable).

The PPM, with the input of the PMT, submits a request for approval of the RFP evaluation process, which includes committee selection, criteria, and scoring, to the Selection Official. Upon approval, the PM coordinates with the PMT to issue the RFP.

Federal Highway Administration Approval

Following Selection Official approval, the PM obtains FHWA's approval to release the RFP per 23 Code of Federal Regulations (CFR) 635.112 and 635.506 for federally funded projects or projects under FHWA oversight.

Advertising the Request for Proposal

The goal of any advertisement is to distribute the materials to as many firms in the industry as possible.

Advertisement Requirements

A CMAR RFP is issued to those firms that submitted Letters of Interest (LOI) (if applicable) as well as to firms attending the Pre-Proposal Meeting (if applicable). A CMAR RFP also is to be posted on the Department's website and published in a newspaper that adheres to the requirements of NRS 338.1692.

Timeframe for Response

When establishing deadlines for submittals, the Department should allow adequate time for proposers to form teams, seek clarification, and prepare a response, as well as time for the Department to issue any necessary addenda. As ultimately determined by the Department, this timing typically ranges from 30 to 45 days based on complexity and size of the project.

2.2.3.5 Pre-Proposal Meeting (Optional)

The Department may host a Pre-Proposal Meeting, the purpose of which is to provide an overview of the CMAR delivery method, an introduction to the project, and an opportunity to answer questions about the project and the CMAR process. The PM should consider including aerials of the project area, applicable reference documents, a status update on current design progression, and project goals to the extent developed at the time of the meeting.

2.2.4 Procurement Clarifications and Addenda

Upon issuance of the RFP, proposers may submit questions and/or request clarifications on the RFP. The Department is to establish a deadline for questions to be submitted, which is to provide enough time for the proposers to adjust their proposals to accommodate any responses.





A proposer is to provide requests for clarifications as directed in the RFP, and the Department's formal responses are provided to any non-confidential requests to all potential proposers (typically through the Department's website).

It may be necessary to issue formal addenda to the RFP in response to proposer questions, to clarify requirements, to correct errors, or to provide supplemental information. The intent of the addenda process is to formally respond to questions and modify the RFP in advance of the proposal due date. If the Department Director and/or FHWA are required to approve the CMAR RFP release, material addenda also require their approval before issuance.

Section 2.3 Procurement Process: Evaluation Phase

Figure 2-5 illustrates the Evaluation Phase process, which is detailed further in the following sections.



Figure 2-5: Construction Manager at Risk Evaluation Phase Process

2.3.1 Evaluation Phase Roles, Responsibilities, and Organization

Building on the roles and responsibilities of the Department's staff involved in the procurement process, the Evaluation Phase includes many of the same key individuals, committees, and support team members. Expanded upon in the RFP E&S Plan, the primary roles and associated responsibilities for key individuals, teams, and committees distinct to the Evaluation Phase are addressed below.

Selection Official

The Selection Official (Department Director or Deputy Director as designated) is responsible for:

Directing the PAT to issue requests for clarification, as needed.





- Disqualifying a proposer as non-responsive, if applicable.
- Accepting or rejecting the initial shortlist recommendation of the Evaluation Panel. If rejected, the Selection Official may direct the Evaluation Panel to reevaluate the proposals.
- Accepting or rejecting the final ranking of proposers based on the results of the interview. If rejected, the Selection Official may direct the Evaluation Panel to reevaluate the interview responses.

Pioneer Program Director (Deputy Director/Chief Engineer) See Section 2.2.1 – Similar role in the Evaluation Phase.

Project Management Team

The PMT members include the PPM, Assistant Chief, Project Management, Project Manager, the PAT, and Service Providers (if applicable) during the Evaluation Phase.

Pioneer Program Manager (Chief, Project Management) See <u>Section 2.2.1</u> – Similar role in the Evaluation Phase.

Assistant Chief, Project Management See <u>Section 2.2.1</u> – Similar role in the Evaluation Phase.

Project Manager The PM is responsible for:

- Maintaining the CMAR procurement schedule.
- Overseeing Service Providers (if used) to support the RFP evaluation and selection committees.

Procurement Administration Team

The PAT is responsible for conducting the initial pre-screen of all proposals based on established responsiveness and pass/fail criteria in the RFP.

Service Providers

See <u>Section 2.2.1</u> – Similar role in the Evaluation Phase.

Evaluation Panel

During the Evaluation Phase, the Evaluation Panel is responsible for:

- Reviewing all responsive proposals when recommending the scoring and initial shortlisting of proposers to the Selection Official.
- Interviewing all shortlisted proposers and recommending a final ranking and most qualified/preferred proposer to the Selection Official.

Observers

See <u>Section 2.2.1</u> – Similar role in the Evaluation Phase.

2.3.2 Evaluating Proposals

The proposal evaluation process follows three steps:





- 1. Pre-screening of proposals based on responsiveness and pass/fail criteria.
- 2. Evaluating and shortlisting the proposals based on qualifications and approach-related criteria.
- 3. Interviewing and establishing a final selection ranking of the most qualified proposer to provide pre-construction services for a project.

2.3.2.1 Pre-Screening Proposals: Responsiveness and Pass/Fail

The purpose of the pre-screening completed by the PAT is to both validate the responsiveness of the proposals and confirm that all pass/fail requirements are met for those proposals received by the proposal due date.

Pre-Screen Considerations

To proceed with evaluation, the Department must receive at least two proposals. If the Department does not receive two proposals, the procurement is canceled or readvertised.

The PAT reviews each proposal to confirm adherence to the pass/fail and responsiveness requirements listed in the CMAR RFP, all of which is in accordance with NRS 338.1691 and 338.1692.

Review and Validation of Results

The PAT may recommend a proposal be rejected if it does not comply with the above requirements or otherwise is not responsive to the RFP requirements. At the Selection Official's discretion, the PAT may waive any minor deficiencies in a proposal, allow a proposer to correct minor deficiencies or clarify/supplement the proposal, or reject a proposal that does not pass the pre-screening process. The PAT reports the results of the pre-screening process to the Selection Official.

2.3.2.2 Evaluating and Shortlisting Proposers

The objective when evaluating and shortlisting proposers is to identify proposals that exceed stated requirements/objectives in a beneficial way by providing expert qualifications, advantages, benefits, or added value to the project through a consistently outstanding level of quality in the proposal's presentation.

Evaluation and Shortlisting Process

After the PAT completes the pass/fail and responsiveness review of the proposal, the Evaluation Panel evaluates all proposals using the evaluation factors listed in the CMAR RFP and consistent with the RFP E&S Plan, for the purpose of determining a shortlist based on an initial consensus scoring of all proposals. The Evaluation Panel's consensus score and comments must be consistent with the procedures described in the CMAR RFP E&S Plan. Only the consensus score and comments are retained for documentation of the process.

The Evaluation Panel uses the consensus scores to determine the initial ranking of each proposal. The shortlist is determined only by the proposal score, and the proposal score is not to be factored into the final selection ranking of the proposers. The Evaluation Panel prepares a memorandum of the recommended shortlist, presented by the





Evaluation Panel chairperson, to the Selection Official. The Selection Official accepts or rejects the shortlist.

Invitation to Interview

The PM, with support from the PAT, invites the shortlisted proposers to participate in the mandatory interview step of the process. The number of shortlisted proposers is at the sole discretion of the Selection Official, but this shortlist must be at least two and not more than five proposers, in accordance with NRS 338.1693. The PAT is to notify all proposers (including the unsuccessful proposers) of the shortlist prior to the interview.

2.3.2.3 Interviewing and Final Selection Ranking

The purpose of interviewing the shortlisted proposers is to rank the most qualified proposer to deliver CMAR services for both the Pre-Construction and Construction Phases of a project.

Interview and Scoring of the Shortlisted Proposers

Following the determination of a shortlist by the Evaluation Panel and approval by the Selection Official, the Evaluation Panel leads an interview with each shortlisted proposer and then arrives at a consensus score of each proposer's interview packet, responses, and content consistent with the procedures described in the CMAR RFP and RFP E&S Plan. In accordance with NRS 338.1693, the final selection ranking is determined by the interview score only, where the proposer with the highest interview score is considered the apparent most-qualified proposer.

The Evaluation Panel prepares a memorandum of the recommended final ranking of the most-qualified proposer, presented by the Evaluation Panel chairperson, to the Selection Official. The Selection Official accepts or rejects the final rankings.

Notification of Results

Once the final selection ranking is established and approved, the PAT is to notify all proposers of the final selection rankings. The PAT sends the Department's Notice of Intent to Award to the apparent most-qualified proposer, and the PM commences negotiations for a PCSA with this proposer.

Section 2.4 Procurement Process: Award Phase

The process to complete the Award Phase is outlined on Figure 2-6 and detailed in the following sections.







Figure 2-6: Construction Manager at Risk Award Phase Process

2.4.1 Award Phase Roles, Responsibilities, and Organization

The Department has established roles and responsibilities as part of the Award Phase to help negotiate the PCSA and related documents, compiling all documents for review, execution, and ratification. Figure 2-7 illustrates the organizational structure for this phase.

Pioneer Program Manager

The PPM oversees PCSA negotiations with the apparent most-qualified proposer, ensuring the integrity of the process and approval of the negotiation summary report and pre-final PCSA (prior to execution).



Figure 2-7: Award Phase Organizational Structure





Project Manager

The PM leads negotiations with the apparent most-qualified proposer and oversees development of the PCSA.

Procurement Administration Team

The PAT issues the notice of intent to award to all proposers, which kicks off the Award Phase. The PAT then documents and tracks receipt of the required forms and documents from the apparent most-qualified proposer.

Attorney General (Deputy)

The Attorney General reviews and approves the final PCSA as to its form and legality. The Attorney General is to be a signatory on the PCSA.

Service Providers

The Service Providers (technical, legal, and financial) provide additional support during the negotiation process as directed by the PM.

Department Director

The Department Director (or designee) provides decisions regarding terms, conducts final review and approval of the negotiation summary report and final PCSA, and is a signatory on the PCSA.

Nevada Transportation Board

As applicable, the Board approves the Selection Official's recommendation to award and execute the PCSA.

Apparent Most-Qualified Proposer

The apparent most-qualified proposer, including the proposer's PM, is an active participant in the Award Phase process with the Department. The proposer is to provide, within a timely manner, all required forms and documents. The proposer is to designate an individual or individuals who are authorized to make decisions and bind the Construction Manager on matters relating to the PCSA and related documents. This individual(s) is a signatory on the PCSA.

2.4.2 Issuing a Notice of Intent to Award

The purpose of the Notice of Intent to Award is to make the industry aware of the Department's intent to negotiate and execute a PCSA with the apparent most-qualified proposer. The PAT issues the notice to both the apparent most-qualified proposer and all other proposers in accordance with NRS 338.1693. This initiates the agreement negotiation process.

2.4.3 Negotiating and Executing a Pre-Construction Services Agreement

The PM and PPM lead negotiations with the apparent most-qualified proposer's authorized representative(s), using the form of the Pre-Construction Services Agreement (PCSA) (as revised to be project specific) and the construction contract as a starting point for discussion.





Content of a Pre-Construction Services Agreement

Included as a template on the Department's public website, the intent of the PCSA is to cover terms and conditions that include the Scope of Services, performance and schedule requirements, budget requirements, compensation, ownership of records, insurance, and termination.

The PCSA also identifies specific terms and conditions to be included in the construction contract (also see NRS 338.1698), including the date by which work must be completed, certain insurance provisions, and that the Construction Manager assumes overall responsibility for ensuring that the Pre-Construction or Construction Phase is completed in a satisfactory manner.

Negotiation Process

The Department negotiates with the apparent most qualified proposer in accordance with NRS 338.1693. If an agreement cannot be reached with the first ranked firm, negotiations with that firm are terminated, and negotiations are undertaken with the second ranked firm. The process is repeated until an agreement can be reached or until a determination is made by the Department to reject all proposers and cancel or readvertise the procurement.

As part of the process, the PM:

- Drafts the Scope of Services from the CMAR RFP (which becomes an attachment to the PCSA).
- Attaches additional reference and project-specific documents as exhibits to the agreement.
- Submits all documents to the Attorney General (Deputy) for review.

The PM is responsible for finalizing the agreement with the selected Construction Manager and completing appropriate negotiations documentation, which is processed in accordance with standard procedures for approving and executing an agreement.

Approval and Notifications

Upon receipt of the Director's approval, the PM notifies FHWA (on federally funded projects or projects under FHWA oversight) that the Department has followed its procurement and evaluation process and is prepared to select the Construction Manager and execute a PCSA.

Agreement Services then obtains the Construction Manager's signature on the PCSA and concurrently prepares the agreement for submission to the Board. If the cost of the PCSA is over the established dollar threshold for agreements, it must be approved by the Board before execution. If the cost is under that threshold, it can be fully executed and reported to the Board as an informational item.

Issuing a Notice of Award

Upon approval and receipt of appropriate signatures, the PAT sends a Notice of Award to the Construction Manager, with a copy to all proposers who participated in the





procurement process. The Notice of Award lists the final rankings, scores for each proposal received, and points assigned to each evaluation factor in accordance with NRS 338.1693. At the time of award, the Department makes public all proposal documents, which may be requested via a public records request.

2.4.4 Debriefing

In accordance with NRS 338.1693, there are two points at which the Department may offer debriefings. First, upon establishing a shortlist of proposers, the PAT may offer a debriefing to unsuccessful proposers, if requested to do so. Second, after conditional or final award of the PCSA, the PAT may also offer a debriefing to unsuccessful shortlisted proposers, if requested to do so.

The debriefing is to focus on the proposer's proposal and interview (if applicable), highlighting the strengths and weaknesses of that proposer and not those of other proposers.

Prior to any debriefing, the Attorney General's Office must be consulted as to content, form, and function of all debriefings. The PM and members of the PAT are to attend and conduct the debriefings. However, the PAT may, at its discretion, invite other members to attend the debriefings.

2.4.5 Filing a Protest

All protests must be filed in writing in accordance with the process and within the timelines specified in the CMAR RFP or applicable services procurement procedures. The Department adjudicates all protests in accordance with the process specified in the CMAR RFP or applicable services procurement procedures, and its decision is communicated in writing.

Each proposer, by submitting a proposal:

- Is required to expressly recognize the limitation on its rights to protest, as noted in the applicable procurement documents.
- Waives all other rights and remedies.
- Agrees that the decision of the Department is final and conclusive.

Section 2.5 Implementation/Contract Administration: Pre-Construction Phase

Once the PCSA is executed, the PM integrates the Construction Manager and ICE into the Pre-Construction Phase of the implementation process. The general timeline of these events is depicted in <u>Appendix D</u>, and the major activities of this phase are illustrated on Figure 2-8.







Figure 2-8: Construction Manager at Risk Pre-Construction Major Activity Workflow

Success for projects using the CMAR delivery method is for the Department and Construction Manager to arrive at a provable GMP for award of a contract to construct the project or portion thereof, which may include GMPs for multiple construction packages. To achieve this, integration of and partnering within the team are critical elements for:

- Decision-making affecting time, materials, means, and methods.
- Accelerating the construction schedule and minimizing construction impacts on the public.
- Implementing innovative processes, while not sacrificing quality realized through early collaboration between the Construction Manager and Designer.
- Enhancing constructability of design and minimizing risk through input from the team.

2.5.1 Pre-Construction Roles, Responsibilities, and Organization

Figure 2-9 shows the reporting relationship, and the following sections detail the roles and responsibilities for those involved in a project's Pre-Construction Phase.

Project Manager

During the Pre-Construction Phase, the PM is involved in overseeing the process, from managing the CMAR Project Team to being responsible for scope, budget, schedule, and quality.

The PM may engage additional support services (either Department or external Service Providers) to support areas such as schedule development,



Figure 2-9: Construction Manager at Risk Design Support Team Organizational Structure





partnering, and risk management. It is advised that a team member (e.g., an externally procured risk manager) be identified early in the process to support the PM in the development and continuous tracking of the risk issues, allocation, and resolution.

Independent Cost Estimator

Reporting directly to the PM, the ICE develops and validates project cost estimates and construction schedules at each identified design milestone so that assumptions, contingency, risk, and approach to the estimate are fully understood by the team.

Designer

The Designer reports directly to the PM and is responsible for performing all engineering design and construction document development, including professionally signing and sealing all design documents.

Advisory Team

This support team is comprised of the subject matter, technical, and administrative experts within the Department, from other public agencies, utility companies, and potentially other stakeholders. The PM invites key personnel (typically at the management or supervisory level) to participate in the process as required. Examples of team participants include:

- Design
- Right-of-Way (ROW)
- Materials
- Traffic Operations
- Location and Mapping

- Environmental
- Utilities
- Construction
- Maintenance
- Public Information

Legal

Financial

Asset Management

Each specific role depends on the project needs but generally is to provide support during the Pre-Construction Phase as follows:

- Engineers, technical, legal, financial, and administrative staff may support the development of surveys, studies, preliminary engineering, ROW acquisition, schedules, cost estimates, specifications, site investigation, phasing, material sampling, value analysis, subcontracting requirements, operation and maintenance needs, public involvement, and other information and activities to facilitate the process.
- Team members are also involved in risk identification and assessment and in developing mitigation and response strategies.
- Construction personnel, including the Resident Engineer, participate in the process to collaborate with the Construction Manager on construction phasing and traffic control, construction schedules, means and methods, pricing, and to ensure that





agreed upon strategies and plans meet the Department's needs during Contract Administration.

Service Providers

Service Providers may provide support during the Pre-Construction Phase as directed by the PM. Services may include engineering, technical, financial, and administrative support.

Construction Manager

During the Pre-Construction Phase, the Construction Manager is responsible for:

- Estimating the quantities of materials, labor, and equipment needed for construction.
- Identifying availability, cost, and capacities of materials, labor, and equipment.
- Identifying and communicating potential risks (including financial risks) and approaches to mitigate.
- Recommending innovations to improve the schedule and cost.
- Creating and updating the project's pre-construction (if directed by the PM) and construction schedule.
- Advising the Department on constructability, construction phasing, traffic control, materials, and phasing of the design as its progresses.
- Reviewing the plans and other project information provided by the Department.
- Providing a preliminary estimating model to be used for estimating the project's costs to serve as a basis for all Opinion of Probable Construction Cost (OPCC) estimates.
- Developing relevant plans, obtaining subcontractor quotes, and coordinating with subcontractors to meet the project's DBE goals.
- Performing, at the direction of the Department, certain pre-construction work such as subsurface utility exploration, public outreach, or survey.
- Preparing the Construction GMP bid for award of a contract to construct the project or portion thereof.

2.5.2 Implementation Phase Project Management Plan

The first step in the process is for the PM to draft an Implementation Phase PMP, which builds on the procurement PMP and defines the methodology for administrating and executing CMAR delivery. At a minimum, the PMP is to address change management procedures, schedule milestones and updating procedures, communication protocols, documentation processes, the established budget and cost tracking processes, a quality plan, and the approach for implementing Construction Manager and ICE input within the design development workflow.

2.5.3 Alignment Activities

The purpose of the alignment activities is to integrate the CMAR Project Team, discuss the project goals, and define definitions and expectations. These tasks are further detailed in the following section and the Scope of Services.





2.5.3.1 Kickoff Workshop

The kickoff workshop orients the team to the project, the CMAR delivery method, the partnering process, and the project stakeholders.

Attendees

All members of the team are to attend and actively participate in the kickoff workshop, which is led by the PM.

Potential Content/Agenda

The PM schedules the workshop and determines the agenda items with the input from the other team members. Agenda items typically include:

- Presentation of project elements, scope, and major milestones.
- Establishing team roles and responsibilities.
- Preliminary identification of project risks, mitigation, innovation, and design input procedures.
- Requirements for change management.
- Establishing scheduling approach and issues.
- Defining a communication plan (including a public outreach strategy and plan) and document control plan.
- Preliminary discussion of cost/pricing development.
- Project tour and/or field visit.

2.5.3.2 Partnering

As established in the Pre-Construction Phase and extending into the Construction Phase, the partnering process promotes early team integration with the goal of developing trust, respect, and cooperation among all key players. This approach helps to resolve constructability issues, allocate and mitigate construction-related risk, and establish pricing and schedule methodologies among the Department, Designer, ICE, and Construction Manager.

Initial Partnering Session

The PM is to identify the team members who are to attend and participate in the initial and ongoing partnering session. The following persons typically attend the session as determined by the PM: Construction Manager's PM and key personnel (including any subcontractors), ICE, Designer, and Department's key Advisory Team members. The PM also is responsible for establishing the time, location, agenda, and facilitator for the partnering workshop.

Ongoing Partnering Efforts

The PM may lead one or more partnering workshops during the Pre-Construction Phase. The PM determines the time, location, and agenda for these meetings with input from the other team members.





2.5.3.3 Initial Approach to Cost Meeting

The initial approach to cost meeting establishes agreed upon assumptions and approaches to the open-book, production-based estimating process used to estimate the design as it develops. These assumptions and approach include alignment among the team on the definition and assignment of direct and indirect costs, overhead, and profit to items of work. This also includes developing a preliminary/initial list of bid items and estimated quantities by the Department's Roadway Design Division (Engineer's Estimate) to be used by all team members when estimating.

Attendees

All members of the team are to attend and actively participate in the meeting, which is led by the Construction Manager.

Potential Content/Agenda

Agenda items typically include:

- Identifying and concurring on all project-related work items.
- Establishing measurement and payment concepts.
- Establishing a plan to communicate changes in scope, quantity, schedule, and phasing.

During this meeting, the Construction Manager discusses and documents:

- Specific cost assumptions and definitions with the Department and ICE as identified in Exhibit 1 of the PCSA.
- Cost/pricing development and process for design input, analysis, evaluation, and resolution of the Construction Manager input into the design and specification development process.
- The approach and methodology to using the Department's cost model/spreadsheet for estimating.

2.5.4 Design Development and Subcontractor Compliance Tasks

The PM leads the team integration within the standard design development workflow (i.e., preliminary, intermediate, and final design/plan, specification, and estimate [PS&E] steps) described in the Department's <u>*Road Design Guide*</u>.

The goal of the CMAR process is for the CMAR Project Team to identify, evaluate, and allocate project risk and incorporate constructability considerations as the design progresses. This affords the opportunity to maximize innovation and reduce project cost and schedule impacts to the point where the design (or any portion thereof) has been sufficiently finalized to establish a provable cost in the form of a Construction GMP bid. Figure 2-10 and the following sections describe the process, tools, and activities to accomplish this goal.







Figure 2-10: Construction Manager at Risk Design Development and Subcontractor Compliance

2.5.4.1 Forums for Input during Design Development

As identified in the PCSA, the PM schedules and leads all needed meetings to incorporate the Construction Manager and ICE's input on the following topics. The Designer continually modifies its design to incorporate any comments, all completed prior to submitting the design at each milestone and before the Department finalizes its risk reserve.

- Plan and specification clarifications.
- Schedule analysis, including acceleration opportunities.
- Phasing or sequencing.
- Constructability and bidability.
- Availability of materials.
- Cost/benefit analysis.
- Maintenance of traffic (MOT).
- Staging needs.
- Third-party impact avoidance and reduction strategies.





- Value analysis and innovation.
- Risk identification and mitigation.
- Changes to the project design, cost, schedule, or quality as the design progresses.

The following sections describe potential forums (e.g., meetings, workshops) to discuss and evaluate each of these topics.

Design and Specification Review Meeting (Design/Discipline Workshop) The intent of a design and specification review meeting is for the team to:

- Review and comment on the current design.
- Define the project-specific work items and related methods of measurement and payment.
- Discuss mitigation of risks or integration of opportunities and innovations realized during the design development process.
- Develop the construction schedule in a collaborative team environment.

The PM is to schedule these meetings to either coincide with each design milestone (i.e., preliminary, intermediate, and final/PS&E design) or as regularly scheduled internal design meetings that are either interdisciplinary or discipline specific (e.g., utilities, MOT, and drainage).

As the design progresses, the Design Division Specification Section modifies applicable quantity measure, measurement, and/or payment specifications. This is to include revision to Division I of the <u>Standard Specifications</u> to account for the team's decisions regarding risk allocation and management via the risk reserve. A common example of a needed modification involves the decision to transfer all quantity risk to the Construction Manager, requiring Division I modifications that disallow relief events for the Construction Manager concerning quantity overruns.

Another result of these meetings is creating and refining a formatted cost model/spreadsheet with project-specific bid item descriptions, quantities, and unit of measurements that the Construction Manager, ICE, and Designer use to ensure a consistent OPCC estimate comparison. Each maintains their respective productionbased cost model/spreadsheet so that the team consistently applies established assumptions, contingencies, risk allocation, and approaches to be used when developing each OPCC estimate.

Risk, Opportunity, and Innovation Workshop

The purpose of the risk, opportunity, and innovation workshop is to identify, define, and document project-specific risk, opportunity, and/or innovations that reduce project cost, improve schedule delivery, and/or enhance quality.

For risk, the PM or another assigned member (e.g., Risk Manager) is specifically tasked with:





- Establishing the basis for tracking and resolving project risk at an initial workshop that is then used throughout the design development process.
- Conducting additional workshops prior to each design milestone or as regularly scheduled throughout the process.

Adhering to the Department's risk management process detailed in the <u>*Project</u></u> <u><i>Management Guidelines*</u>, the PM or risk manager leads this workshop by documenting:</u>

- Probability of occurrence.
- Potential mitigation or implementation strategies.
- Magnitude of cost and quantity impacts.
- Schedule impacts.

For innovation, the PM leads the team in identifying and documenting opportunities and innovation that could be incorporated into the project. The PM is to establish a procedure to evaluate the ideas and decision points to determine whether to incorporate the ideas. This process proceeds independent and parallel to all other design development activities to avoid impacts to the delivery schedule.

2.5.4.2 Developing an Opinion of Probable Construction Cost Estimate

The purpose of the OPCC estimating process is to provide an "opinion" of cost for the construction work. This involves accounting for the means, methods, phasing, staging, and constructability, alongside the current labor, equipment, and materials availability in the market at the anticipated time of construction. The OPCC process informs the CMAR Project Team, through a transparent "open-book" estimating process, on what to prioritize for avoiding and reducing risk, cost, and schedule impacts, all while improving quality and constructability.

At each design milestone:

- The Construction Manager develops and provides its OPCC estimate and corresponding construction schedule for the project.
- The Designer develops the Engineer's Estimate.
- The ICE develops a production-based estimate.

All team members are responsible for verifying the quantities and methods of measurement and payment for all work items.

As established during each project cost and schedule workshop, both the Construction Manager and ICE estimates are to:

- Be formatted consistently with the agreed upon production-based cost model/spreadsheet and the Engineer's Estimate.
- Reflect the agreed upon methods and measurements of payment anticipated for each bid item.





Exhibit 1 of the PCSA directs the team on how to communicate via the open-book estimating process and provides definitions for aligning each estimator's understanding of cost categories and accounting (e.g., direct costs, indirect costs, profit, overhead).

The Department, via the formatted cost model/spreadsheet, compares the Construction Manager, ICE, and Engineer's estimates to identify items that are not within a satisfactory range, as determined by the PM. The Department maintains confidentiality by blinding the prices and restricting access to the Construction Manager and ICE estimates.

Once the estimates are evaluated, the PM leads an OPCC review meeting to discuss items that are not within the established satisfactory range. The objective of this blind bid item comparison is to ensure that the assumptions, contingency, risk, and approach to the estimate are fully identified, delineated, and understood. Where design questions arise that require cost or schedule information that would be useful to enhance the design, the PM may schedule additional project cost and schedule workshops to focus on specific project elements and options rather than the total project cost.

Upon completion of each OPCC review meeting, each team member resubmits their OPCC estimate reflecting their revised pricing that results from the meeting dialogue.

2.5.4.3 Developing the Risk Reserve Specification

As part of the Department's risk management process defined in the <u>Project Management</u> <u>Guidelines</u>, the risk reserve includes a list of potential risk events in the specifications and an aggregate sum included in the Construction GMP bid to mitigate the occurrence of identified risks and control costs during the Construction Phase. Specifically, the Department has determined to transfer quantity risk for all contract items to the Construction Manager as allowable under NRS 338.

Drafting the Risk Reserve Specification

By the intermediate design milestone and with information provided by the Design Division Specification Section, the PM develops the draft risk reserve specification, which is reviewed by the team and finalized prior to the Documentation Date (Doc Date).

The process and resultant specification allow the Construction Manager, ICE, and Designer to estimate costs independent of identified risks, which enhance the ability to make more accurate cost comparisons. This approach also permits the team to address transfer, mitigation, and retirement of risks during the Pre-Construction Phase, including advancing early procurement and additional field investigations if needed.

2.5.4.4 Completing Subcontractor Compliance Activities

As the design progresses, the PM must be aware of two specific compliance activities developed in parallel with the design development and OPCC estimating processes.

Developing and Finalizing the Subcontracting Plan

The purpose of the subcontracting plan is to describe a reasonable procedure (with an associated subcontractor proposal form) for conducting the procurement and approval processes applicable to all Construction Manager subcontracts.





The plan is to include timing for each step of the qualification and proposal process, with the proposal form, qualification determinations, and selections made in accordance with NRS 338.16991 and 338.16995. The Department approves the subcontracting plan and associated subcontractor proposal form based on its adherence to the defined requirements, at its sole discretion.

The Construction Manager is to initially draft and submit its subcontracting plan to the Department's Contract Compliance Division and the PM:

- Prior to the OPCC submittal associated with the intermediate design milestone; and,
- Prior to soliciting any qualifications, proposals, or bids for subcontracts.

The Construction Manager works with Contract Compliance to finalize the plan that is acceptable to the Department and FHWA, as applicable. The PM and Construction Manager are to be aware that NRS specifies time frames that may be upwards of 60 days to complete prequalification, solicitation, and evaluation of subcontractor proposals.

It is the Construction Manager's responsibility to maintain, revise, and obtain approval from the Department for any changes that may arise as the design progresses. The Construction Manager also is responsible for executing all subcontracting efforts, which is considered a normal cost of doing business and is not reimbursable or compensated under the PCSA.

Developing and Finalizing the Disadvantaged Business Enterprise Performance Plan

As part of negotiations of the construction contract and prior to the award and execution thereof, the Construction Manager is to develop a DBE performance plan that defines how it plans to meet the DBE goals and requirements. This plan also includes monitoring and reporting requirements that apply during the construction contract.

Based on the DBE goal set by Department's Contract Compliance Division, the Construction Manager submits the initial draft of the DBE performance plan no later than the intermediate design milestone, updating the plan before the final/PS&E design milestone and submitting an approved, final plan prior to both the Doc Date and its Construction GMP bid for the project or a portion thereof. The Construction Manager is responsible for obtaining approval (in the Department's sole discretion) of the DBE performance plan from the Department's Contract Compliance Division prior to submittal to the PM.

2.5.4.5 Finalizing Design and Arriving at a Provable Cost

When the PM determines, with input from the CMAR Project Team, that the design has progressed to a point where the project or any portion thereof is sufficiently finalized to enable a provable cost determination, the team prepares a design and specifications package and corresponding estimate.

The point to determine a provable cost occurs when the Construction Manager can confidently assign a GMP to each item of work and the Department can measure and account for quality and payment.





Verifying and/or Modifying Bid Items

The Designer provides to the Design Division Specification Section the design and specifications package and its corresponding estimate to verify the bid items and ensure that the standard Department bid items are being used to the extent possible. The Specifications Division confirms or modifies the bid items and notifies the Designer of any required changes. This is consistent with the typical design development workflow for the Quality Assurance/Quality Control (QA/QC) Specifications Review Process defined in the Department's <u>Road Design Guide</u>. The Designer then communicates confirmation of or modifications to the bid items to the PM, ICE, and Construction Manager.

Multiple Guaranteed Maximum Prices/Early Work Packages

When the Department determines, with input from the team, value in progressing a portion of the project to a level sufficient for Construction GMP bidding but prior to final design of the overall project, that portion of the project is to follow the previously described process (Figure 2-10) separate from the remaining work elements.

The portion of the work to be contracted separately should result in a project with independent utility and severability from any anticipated construction contracts for the project. Through this, the Department maintains its ability to contract with others in the event the Department does not accept the Construction Manager's bid for future work on the project.

For each GMP on a project, the team releases a design and specifications package and corresponding estimates to be used during the respective final OPCC and Construction GMP bid processes.

Procuring Long-Lead Items

The team may also identify opportunities to procure a long-lead item or specialty construction material/equipment during the Pre-Construction Phase to reduce delays or avoid price escalation. If identified, the Department procures the materials following appropriate procurement procedures, including FHWA approval following the Public Interest Finding regulations when federal funding is used. When considering this option, if the long-lead item or construction material is acquired but not installed, the cost of such material may not be eligible for federal-aid participation. In some cases, it may be more advantageous to use state funds depending on the cost of the item.

2.5.4.6 Establishing a Documentation Date (Doc Date)

For CMAR projects, the Department completes several internal processing activities that precede a project's Doc Date and advertise date. This includes the activities defined in Section 6.10 *Quality Assurance/Quality Control (QA/QC) Specifications Review Process* and Section 6.11 *Documentation Date (Doc Date)* of the *Road Design Guide*. Specifically, the PM determines the Doc Date, advertise date, and bid opening date, and the lead Design Engineer sets the final prices for the preliminary agreement estimate, locking the estimate in accordance with the requirements of the Road Design Guide. While the standard process is followed, the uniqueness of CMAR delivery is having to update any





identified subcontractor costs in the previous OPCC estimates with finalized costs, all done prior to locking the estimate and setting the Doc Date.

Upon completion, Administrative Services advises the team and other applicable Department individuals that the project is ready for construction bidding. Additionally, the PM notifies FHWA (if applicable) that the Department has followed its processes and is prepared to proceed through the Construction GMP bid/advertisement process with the Construction Manager.

2.5.5 Construction Bidding

Figure 2-11 depicts the Construction GMP bid process, with the CMAR Project Team having:

- Completed the design to finalize the Engineer's Estimate.
- Finalized the plans and special provisions.
- Posted the contract documents to account for a fixed price or the cost of the work, plus a fee, with a GMP to complete the construction work.

2.5.5.1 Creating and Submitting the Initial Bid

Contract Services makes the contract available so that the Construction Manager and ICE can enter their respective bids into the electronic bidding system.

While Contract Services "opens" the bids in the system, it does not publicize the bid opening. Bid



Figure 2-11: Construction Manager at Risk Construction Guaranteed Maximum Price Bidding Process

tabulations depicting the unit and total prices for all bidders, including the Engineer's Estimate, are generated by Contract Services. This information is sent to the PM and other members of the team, as directed by the PM, but the bid information remains confidential until award of the construction contract.





2.5.5.2 Verifying the Reasonableness of the Guaranteed Maximum Price

The purpose of this step is for the PM to compare the Construction Manager and ICE bids against the Engineer's Estimate, analyzing the information for significant variance in individual contract items between the three bids. The PM consults applicable Division Heads and the ICE, as needed, for any clarification.

If needed, the process proceeds through additional discussion and negotiations between the Department, led by the PM, and the Construction Manager for Construction GMP bid costs that vary excessively higher or lower compared to the ICE or Engineer's Estimates. As part of the negotiations, the Department reserves the right to determine the items for discussion with a focus on those with the greatest cost impact and/or variance. The Department also continues to maintain confidentiality of the bid prices by blinding the prices and restricting access to the submitted bids. Via the open-book process, the Department continues to access all Construction GMP bid proposal documents, quotations, takeoffs, subcontract bids, and other construction cost estimates during negotiations.

If any clarifications or alterations are identified for the design and specification package, the Designer revises and reissues its documents in support of a second/final Construction GMP bid submittal. Revisions are processed as supplemental notices to the original contract documents and follow the same process as Design-Bid-Build (DBB) supplemental notices regarding programming, certifications, approvals, etc.

The Construction GMP bid can be offered no more than two times per NRS. After the second and final bid, the Department reserves the right, at its sole discretion, to terminate the bidding process and initiate such other actions, including procurement either of the construction contract scope of work by someone else or pursuant to another delivery method in accordance with NRS 338.1696.

If the Department finds the Construction GMP bid to be acceptable (i.e., the bid appears reasonable and balanced) at either the first or second submittal point, the PM requests Contract Services to begin the bid review process.

2.5.5.3 Contract Services Finalization

For an acceptable Construction GMP bid, Contract Services reviews and finalizes all required contract documents for bidding, including required affidavits and reports, as the last step before transitioning into the Award Phase.

2.5.6 Construction Contract Award Phase

The process to complete the construction contract Award Phase, including notice of award, Board and FHWA approvals (as applicable), and issuing a NTP, is defined in the Department's *Construction Manual*.

Section 2.6 Implementation/Contract Administration: Construction Phase

Upon NTP, the Department's Resident Engineer administers the contract following the Construction Division policies, procedures, and manuals as required by the FHWA/NDOT





Stewardship and Oversight Agreement and 23 CFR 635. These policies, processes, and procedures are uniform for DBB and CMAR projects, unless otherwise noted in the Department's *Construction Manual* and *Documentation Manual*.

Of note, the PM remains involved in the Construction Phase to administer/oversee the following activities:

- Closing out the PCSA with the Construction Manager.
- Evaluating eligibility of contract adjustments if the Department directs a scope change.
- Reviewing and negotiating, in collaboration with the Resident Engineer, all requests to draw upon the risk reserve, subject to the following:
 - The risk reserve is administered at the Department's sole discretion.
 - Any exceedance of the risk reserve amount in the Construction GMP bid is borne by the Construction Manager.
 - Any or all monies not used from the risk reserve amount at the end of the project remain with the Department.
 - The risk reserve amount is administered to address only those risk events listed in the construction contract.
 - The Department may authorize all or any portion of this amount to an individual or any collective occurrence of the identified risk events.
- Supporting the Resident Engineer as requested and as needed.

2.6.1 Program, Project, and Legislative Reporting

Periodic Nevada State Legislature CMAR program and project reporting is required under NRS 338.169. The following provides a general overview of the reporting requirements.

2.6.1.1 Project Data Gathering

Led by the PM, the CMAR Project Team helps gather the following data, which is tracked in a master spreadsheet for project reporting and reference purposes.

- Construction Manager and ICE procurement process, including evaluation factor weighting and Observer involvement.
- Documentation of the Implementation/Contract Administration Phase costs, including pre-construction and other construction costs (e.g., early acquisition of long-lead items, innovations applied, and schedule performance).
- The Engineer's Estimate, ICE's Construction GMP bid, and Construction Manager's GMP bid.
- Construction contract award amount.
- Evaluation of how the CMAR process advanced opportunities for innovation and management/mitigation of risk, impacted cost and schedule, and dealt with the complexity of design and construction.





This information is tracked in a data mining spreadsheet and used as a reference for future CMAR projects and also for shaping the CMAR program over time. Uses of this information may include determining CMAR performance, identifying trends in risk identification and mitigation, and informing the Project Management Division as to whether Risk Reserves are over- or under-stated.

2.6.1.2 Construction Manager at Risk Annual Program Report

On or before January 1st of each year, and in compliance with NRS 338.169, the Department prepares an annual report on the CMAR program. This report is submitted to the Director of the Legislative Counsel Bureau for transmittal to the Legislature in evennumbered years, or to the Legislative Commission, if the report is submitted during an odd-numbered year. This report includes all CMAR activities and documentation of CMAR project work (both PCSAs and construction contracts) during the preceding calendar year.

To meet the January 1st deadline, the Project Management Division prepares and internally submits, to the appropriate internal divisions, its first draft of the CMAR Annual Program Report for review and approval on or before November 1st. The report is to include:

- A description of the projects.
- The name of the Construction Managers.
- If a project has not been completed at the time the CMAR Annual Program Report is submitted, a report on the progress of the project.
- If a project has been completed at the time of the CMAR Annual Program Report submittal, an explanation of whether the Department is satisfied with the project and with the contractual arrangement with the Construction Manager.

The PPM evaluates the data provided and sends the report to the Director for final approval prior to external distribution. Information from the CMAR Annual Program Report is then provided to the Performance Analysis Division and included in the Department's annual Performance Management Report.





CHAPTER 3 DESIGN-BUILD





Chapter 3 Design-Build

Section 3.1 Overview of Delivery Process

Design-Build (DB) is an alternative contracting method where the Nevada Department of Transportation (NDOT or the Department) enters into a single contract with a Design-Builder to design and construct a transportation facility. During the DB delivery process, the Department develops project-specific procurement and contract documents that use performance requirements to convey project obligations to the Design-Builder, while also allowing flexibility to implement innovative solutions consistent with the Department's goals and objectives. The process results in a clear definition of a project's performance objectives, establishment of design parameters, and development of an initial design concept that allows proposers to develop technical proposals and lump-sum, fixed-price bids for project development and delivery.

3.1.1 Project Delivery Workflow

The typical DB process follows the workflow illustrated on Figure 3-1. <u>Appendix E</u> provides a more detailed graphic example of the activities, milestones, and decision points involved in the process.



Figure 3-1: Design-Build Project Delivery Process

A brief description of each phase is as follows:

- Identification Phase is when the Department uses the established Project Delivery Selection Approach (PDSA), as described in <u>Section 1.4.2</u>, to identify the optimal delivery method for a project.
- <u>Solicitation Phase</u> is the first phase in the procurement process. Primary elements of the Solicitation Phase include advancing pre-procurement project development, shortlisting the most qualified proposers through a Request for Qualifications (RFQ) process, and developing a Request for Proposal (RFP) package.
- Evaluation Phase is the second phase in the procurement process, during which proposals submitted in response to the RFP are evaluated. The Evaluation Phase concludes with the selection of a best-value proposer in response to cost, technical approach, and responsiveness criteria listed in the RFP.





- <u>Award Phase</u> is the final phase in the procurement process that involves contract negotiations, conformance, award, and execution by the Design-Builder, Department, and Nevada Transportation Board (Board) of Directors.
- <u>Contract Administration Phase</u> includes the design and construction of the project. During this phase, the Department performs administrative functions, partners with the Design-Builder in achieving the project goals, and monitors project performance to ensure that the work completed is in conformance with the requirements of the contract documents.

As summarized on Figure 3-2, the ultimate outcome of the procurement process is the evaluation, selection, and award of a project to the best-value proposer.



Figure 3-2: Design-Build Procurement Process

Section 3.2 Procurement Process: Solicitation Phase

The Department uses a two-step process to progress through the Solicitation Phase.

- Step 1 Shortlisting includes the preparation and issuance of an RFQ that defines minimum and desired qualifications and evaluation criteria for key personnel and DB proposal teams/firms. Prospective teams submit Statements of Qualifications (SOQ) in response to the RFQ. The Department then evaluates the SOQs according to the RFQ's evaluation criteria to establish a shortlist of the most qualified teams to move to Step 2.
- Step 2 Best-Value Selection involves the preparation and issuance of an RFP to all shortlisted proposers. Each proposer submits a separate technical and price proposal in





response to the RFP. Prior to opening the price proposal, the Department evaluates the technical proposals. A formula considering the scores of both the technical proposal and price proposal is then applied to determine the proposer who provides the best value.

Concurrent with this two-step process, the Department advances preliminary engineering and design and sets a project's basic configuration to establish the overall project concept that the proposers use to develop their technical and price proposals.

3.2.1 Solicitation Phase Roles, Responsibilities, and Organization

The Department has established roles and committees to:

- Help develop the RFP, RFQ, and preliminary design.
- Evaluate the SOQs and the technical and price proposals developed in response to the RFQ and RFP.



Figure 3-3 illustrates the organizational structure for advancing the procurement process.

Figure 3-3: Design-Build Procurement Process Organizational Structure: Solicitation and Evaluation

As shown on Figure 3-3, oversight of the procurement process is provided by the Board, the Director (typically acting as the Selection Official), and the Pioneer Program Director (PPD). The responsibilities for each of these roles are as follows.

Nevada Transportation Board

The Board formally approves the use of DB delivery at the end of the Identification Phase.





Pioneer Program Director (Deputy Director/Chief Engineer)

The PPD is responsible for reviewing all recommendations and key decisions associated with the Solicitation Phase to ensure consistency with the intent of the program and the goals and objectives of the Department.

Selection Official

The Selection Official (Department Director or Deputy Director as designated) is responsible for:

- Overseeing the initial appointments and substitutions of the Project Review Team (PRT).
- Approving the process and plan for evaluating the SOQs.
- Determining the participation levels of individuals who may have a potential conflict of interest, including ending or prohibiting an individual's participation in the evaluation and selection process or imposing mitigation for such conflicts or relationships to ensure a fair evaluation and shortlisting process.
- Directing the Procurement Administration Team (PAT) to issue requests for clarification, as needed.
- Disqualifying a proposer as nonresponsive, if applicable.
- Accepting or rejecting the recommendation of the Qualifications Selection Committee (QSC). If rejected, the Selection Official may direct the QSC to reevaluate the SOQs.

Project Management Team

The Project Management Team (PMT) is responsible for overseeing development of the procurement documents and preliminary design. The PMT is comprised of various roles as described below.

Pioneer Program Manager (Chief, Project Management) The Pioneer Program Manager (PPM) is responsible for:

- Identifying and requesting appointment of the Selection Official.
- Appointing the Project Manager (PM).
- Providing recommendations on the composition of the PRT.
- Coordinating with members of the PRT to make decisions on issues throughout the Solicitation Phase and the overall procurement process.
- Ensuring that appropriate internal Department representatives integrate external stakeholders (such as affected local agencies, Federal Highway Administration [FHWA], the State Controller's Office, and the State Treasurer's Office) and Service Providers into the Solicitation Phase and overall procurement process, as appropriate.





Assistant Chief, Project Management

The Assistant Chief, Project Management is responsible for supporting the PPM in providing oversight for the procurement process and coordinating with the PMT to facilitate decisions, provide direction, and recommend changes to the PPM.

Project Manager

The PM oversees the management functions of the Solicitation Phase, in addition to the development of the procurement documents (e.g., RFQ and RFP). The PM is responsible for:

- Recommending PRT committee members and coordinating approvals with the Selection Official and PPM.
- Maintaining the DB procurement schedule.
- Overseeing preparation of the draft Instructions to Proposers (ITP), Contract, Technical Provisions, and Reference Information Documents (RID).
- Overseeing external Service Providers to support the PMT.
- Developing a Project Management Plan (PMP) to guide the procurement process.
- Recommending and seeking Director approval of the stipend value, as applicable for the project.

Procurement Administration Team

The PAT is comprised of members from Agreement Services, the Department's legal counsel, and others identified by the PPM. The PAT is responsible for:

- Overseeing administration of the procurement process to ensure confidentiality, consistency, and fairness.
- Reviewing the submitted SOQs for compliance with pass/fail and responsiveness criteria in the RFQ and reporting the results to the Selection Official.
- Serving as a point of contact in the event a member of the team has questions or encounters issues relative to the evaluation of SOQs.
- Requesting additional information or clarification from proposers upon direction from the Selection Official.
- Ensuring timely progress of the evaluations, leading coordination for any consensus meeting(s) or reevaluations(s), and ensuring appropriate records are prepared and maintained (e.g., consensus/debriefing comments).
- Controlling all procurement documents, including SOQs and confidentiality statements, for the entire procurement process.

Service Providers

Service Providers may provide support in the preparation of the procurement documents and/or administration of the procurement process as directed by the PM. Services may include procurement, technical, financial, and administrative support.





Advisory Team

This support team is comprised of the subject matter, technical, and administrative experts within the Department. The PM invites key personnel from the affected District, technical discipline, and functional groups to participate in the process as required. Examples of team participants include:

- Design
- Right-of-Way (ROW)
- Materials
- Traffic Operations
 - Location and Mapping
- Legal

- Environmental
- Utilities
- Construction
- Maintenance
- Public Information
- Financial

Asset Management

Project Review Team

The PRT includes the Qualifications Evaluation Team (QET) and QSC, which are composed of Department representatives and may include representatives of affected local, state, and federal agencies, each having expertise to support Solicitation Phase activities. At the discretion of the PM, the Department may engage Service Providers to support the PRT's efforts.

Qualifications Evaluation Team

The QET reviews and evaluates all responsive SOQs, providing recommendations to the QSC.

Qualifications Selection Committee

The QSC reviews all responsive SOQs and considers the findings of the QET when recommending the shortlisting of proposers to the Selection Official.

Observers

Observers may attend to observe the procurement process. Observers are appointed by the PPM and may consist of representatives from the Department's legal counsel, FHWA, the Project Management Division, and/or Agreement Services.

Each specific role depends on the project needs but generally is to provide support during the procurement process as follows:

- Engineers, technical, legal, financial, and administrative staff, support the development of surveys, studies, preliminary engineering, and procurement documents, including: RIDs, Reference Design, Technical Provisions, Contract terms and documents, and other information to facilitate the procurement process.
- Advisory Team members are involved in risk identification and assessment and developing mitigation and response strategies.





 Construction personnel, including the Resident Engineer participate to ensure that aspects of the procurement process are sufficient to meet the Department's needs for compliance oversight during the Contract Administration Phase.

The roles of the PMT and PRT have minor variations in future phases and are more fully described in subsequent sections.

3.2.1.1 Assembling the Team

Once a project is identified and approved for DB delivery, the Department assembles a team that includes the PMT and PRT, Resident Engineer, and other Department staff to advance the financial, legal, contractual, and technical aspects of the project during the Solicitation Phase.

Confirmation of the Selection Official is the initial step. With input from the PM, the PPM also recommends committee members for the PMT, PRT, and Observers. The PM also should identify and engage team members to be involved in the Contract Administration Phase, as needed. This is to help ensure consistency between the procurement process and the Contract Administration Phase. Engagement could include other Department staff and Service Providers (e.g., technical, financial, legal, insurance) to support development of the preliminary engineering, technical performance requirements, and risk analysis/mitigation tasks. This coordination should start early to allow appropriate studies and mitigation efforts to be completed within the established schedule.

The PM is to procure services in accordance with the <u>*Project Management Guidelines*</u> and standard procurement processes.

3.2.2 Project Development

During the Solicitation Phase, the Department develops procurement documents and advance preliminary design activities to clearly and concisely convey the scope, schedule, and technical requirements that govern the work that occurs during the Contract Administration Phase, including both design and construction. This serves two purposes:

- 1. Establishes the minimum requirements associated with designing and constructing the project.
- 2. Provides each proposer the general parameters by which to prepare its technical proposal and lump-sum, fixed-price bid.

3.2.2.1 Preparing a Project Management Plan

The PM, with support from the team, prepares a PMP at the beginning of the Solicitation Phase to establish the overall processes and objectives for the project. This PMP also identifies the:

- Roles and responsibilities of the team during the procurement process (including contact information and organizational charts).
- Project's risks and challenges.
- Procurement and overall project schedules.
- Project budget at the time of publication.




The PMP is a living document, and the PM is to update the PMP throughout the procurement process and throughout the Contract Administration Phase, as needed. The PMP is to be endorsed by the PPD, PPM, and the Selection Official.

3.2.2.2 Developing the Appropriate Level of Preliminary Engineering

The objective of preliminary engineering is to perform engineering studies and initial design resulting in a Reference Design that mitigates risk, facilitates advancement of the National Environmental Policy Act (NEPA) and the ROW acquisition processes, and establishes the Department's conceptual design for the project. Determining the appropriate level of design in a DB context requires balancing the project's needs, goals, and risks. Providing too much design may restrict innovation and increase design liability for the Department, whereas providing too little design may result in the Department not getting the project it wants or placing undue risk on the Design-Builder. Each project is unique, and the PM should consider the scope and scale of the preliminary engineering efforts when determining the appropriate level of design. For example, a higher level of design or specification may be necessary when compatibility with existing project elements is necessary. Ultimately, the goal is to provide enough information to allow a proposer to prepare a technical proposal and competitively bid the project.

Collection of base project data is important when compiling project information. However, unlike Design-Bid-Build (DBB) projects, the Department should not undertake interpretations, design recommendations, extrapolations, and/or analysis as they may result in retention of risk that otherwise could be better dealt with by the Design-Builder.

Supported or led by members of the Advisory Team, as assigned by the PM, the following actions provide general guidance by subject matter regarding base project data collection.

Survey and Mapping

- Identify existing and future ROW limits, construction easements, and/or Departmentacquired temporary interests associated with the Reference Design that establish:
 - Control throughout the project.
 - Existing cadastral information describing existing and future ROW.
 - Temporary construction or permanent easements associated with the Department's Reference Design.
 - Topographic information, such as contour lines and major site features, to define the limits of the project consistent with the basic configuration and planned ROW limits. (This level of mapping should also support other data gathering investigations and provide the base map for delineating feature locations.)

Geotechnical Investigations

 Conduct investigations to document conditions and materials specific to a boring location (not interpolations between boring locations), refine the risk management plan, and establish a baseline for change conditions via raw data.





Utility Investigations

- Collect aboveground utility types/locations and conduct subsurface utility investigations to locate and classify utilities.
- When appropriate to mitigate schedule risks, advance certain utility adjustments to avoid delays, and/or enter into early preliminary utility work packages with impacted utility owners to define and document schedule/cost-sensitive design and construction assumptions.

Hydraulic and Hydrologic Analyses

• Determine design criteria related to flow requirements and when identifying any special issues of concern.

Traffic

 Conduct studies or modeling to provide the basis for certain design criteria related to traffic forecasts, noise studies, air quality studies, intersection channelization requirements, lane configurations, and pavement designs.

Structure Condition

• Conduct surveys to determine adequacy of existing structures.

Subject to project-specific needs, the general guidelines for advancing various design elements during the procurement process are provided below by discipline.

Roadway Design

- Establish a horizontal and vertical alignment with consideration for vertical clearances.
- Define general project limits and ROW limits.
- Identify locations for signals and Intelligent Transportation Systems (ITS) work.
- Determine interchange types and locations.

Maintenance of Traffic

 Devise a Maintenance of Traffic (MOT) strategy to clearly define project closure impact limitations (i.e., permitted construction closures). Develop a list of all permitted construction closures (including route, direction of travel limits/movement, minimum available lanes, closure time period requirements, and allowable construction work) for inclusion in the technical provisions.

Structure Design

Progress design to define the allowable types of structures.

Pavement and Subgrade Conditions

- Document pavement conditions through pavement condition reports.
- Establish the structural composition of existing pavements within the project limits.

National Environmental Policy Act and Environmental Permitting

 Advance the NEPA process by conducting necessary preliminary engineering, environmental studies, definition of major project features, selection of a preferred





alternative, and preparation of the applicable NEPA documents (e.g., Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement).

 Identify and establish permits to be obtained by either the Department or the Design-Builder. The Department may advance aspects of its preliminary engineering to obtain certain environmental permits or certifications (e.g., Section 401 certification, Section 404 permit, and/or Section 408 permit).

Right-of-Way

- Progress design to allow definition of the planned ROW limits and establish acquisition needs and schedule.
- Advance acquisition of ROW, when appropriate. In some cases, ROW may be acquired by the Design-Builder.

Third-Party Coordination

- Coordinate development of relevant agreements with local government/agencies, utilities, and railroads to the extent possible. Agreements should address applicable design criteria, review and response times, future maintenance expectations, and the specific responsibilities of the Department, Design-Builder, and the affected entity.
- Document the status of any outstanding or incomplete agreements and establish schedule and responsible parties for completion.
- Document assumed conditions included in the draft agreements.

In general, the preliminary engineering efforts are to establish the overall basic configuration and primary project objectives, while maintaining flexibility for innovative design solutions from the proposers. The risk identification process and other engineering study results may establish a need for additional preliminary design to mitigate risk, inform risk allocation decisions, and allow proposers to better refine their bids.

3.2.2.3 Creating and Updating a Project Schedule

The PM, in coordination with the team, develops and maintains a project schedule to document all activities related to the preliminary engineering, procurement, design, and construction of the project. Typical schedule milestones for the Solicitation Phase include:

- RFQ release.
- SOQ received.
- Shortlist announcement.
- Draft and Final RFP release.
- Final Alternative Technical Concept (ATC) submittal due date.
- Proposal due date.

The PM leads schedule status meetings on a regular basis, or when significant changes occur, as defined in the PMP. The PM coordinates any recovery schedules to accommodate potential delays with other team members.





3.2.2.4 Establishing and Updating Project Cost

Early establishment and continual tracking of project cost is critical to understand current budget status and provide data to analyze the value of delivery. Building upon the cost estimate developed in the Identification Phase, the PM, with support of the team, maintains and refines a DB cost estimate over the duration of the project.

Estimate Details

The PM is to update the cost estimate consistent with the DB delivery model, which includes costs for engineering (Department and Design-Builder), outsourcing (e.g., hiring Service Providers for DB procurement, construction support/augmentation), utility relocation, ROW acquisition, permitting and mitigation, and construction.

Analysis Considerations

The cost estimate should account for any cost savings that may result from a shorter project schedule, a common characteristic of a DB project. Example cost savings for an accelerated completion could include user costs, inflation costs, and Department engineering costs. The PM should also separately track any anticipated costs or savings associated with DB-specific risk allocations or anticipated savings due to project innovations. Tracking these elements allows for a quantitative value of risks and opportunities during preparation of the risk register. The PM must also account for any stipend amount payable as part of the DB procurement in the cost estimate.

3.2.2.5 Conducting a Project-Specific Risk Analysis

Risk analysis (i.e., assessment, allocation, and mitigation) is a critical element for both project and contract development throughout the procurement process. The PM, with support of the team, identifies and assesses potential risks and preferred risk allocation, building on any previous work completed during the Identification Phase. As the procurement progresses, the team continues to draft and refine strategies to avoid/mitigate impacts to schedule and/or cost, in addition to maximizing opportunities that add value to the project.

The following describes additional risk-related activities to help the Department identify, analyze, and manage project risks and opportunities.

Risk Assessment

The PM may coordinate and facilitate risk discussions to identify, assess, and preliminarily allocate risks specific to the project. Initiating the risk assessment early provides valuable information for developing the procurement documents, notably the contract. While timing may depend on the level of preliminary engineering available, projects that have advanced through the NEPA process should be ready for a detailed risk assessment.

Based on the findings developed throughout the Solicitation Phase, the Department generates a Risk Register and Risk Report to both document the discrete risks and opportunities and to establish an overall approach to risk management. Cost estimation can be completed for projects of certain thresholds that incorporate risk assessments,





and the <u>*Risk Management and Risk-Based Cost Estimation Guidelines*</u> can assist in the preparation of this estimate.

Value Analysis

Moving Ahead for Progress in the 21st Century Act (MAP-21) exempts DB projects from Value Engineering (VE) requirements (per 23 U.S.C. 106 (E)(5)) because the DB process incorporates value engineering concepts into the ATC process, competitive procurement, and terms of the contract. However, the team should still consider opportunities to add value to the project throughout the procurement process. This focus is also be carried into the VE Cost Proposal process during the Contract Administration Phase.

3.2.2.6 Programming a Design-Build Project

The Department establishes budgetary authority for DB projects prior to award of the contract. DB projects are programmed using federal, state, local, and/or bond funds. For federally funded projects, funds typically are programmed at issuance of the RFP or prior to award.

The DB project must be listed in the Annual Work Program as well as the Statewide Transportation Improvement Program (STIP) to complete the programming action.

3.2.2.7 Establishing a Stipend Amount

At the time of the Board's approval of DB as the selected delivery method for a project, the Department may request the approval of a stipend to DB proposer teams that submit a responsive but unsuccessful proposal. The intent of the stipend is to encourage competition and higher quality proposals. If a stipend is paid to an unsuccessful proposer, the Department owns the ideas in the proposal, including any ATCs. The Department may evaluate and select the ideas in the unsuccessful proposals that may provide significant public benefit and could negotiate with the best value/preferred proposer to incorporate these ideas into the conformed contract at time of award, if the Department is confident in the potential benefits.

The Department anticipates the use of a stipend for a two-step selection process, where an RFQ is followed by an RFP. DB firms are eligible to receive a stipend if they are shortlisted from the RFQ step and submit a responsive proposal at the RFP step. The Department may elect to use a two-step selection process and not offer a stipend, if the work to develop a responsive proposal is considered to be minimal.

The PM provides a recommendation regarding the use of a stipend, stipend range, or fixed stipend amount, as applicable, to the Department Director for approval. The recommended stipend range or fixed amount typically is based on the estimated contract price with adjustments made for influencing factors. The amount of reimbursement must not exceed, for each unsuccessful finalist, three percent (3%) of the total amount to be paid to the best-value proposer as set forth in the contract (NRS 408.3886(6)(b)).

Table 3-1 provides general guidance for determining the dollar amount of a stipend offered to a responsive proposer. However, a variety of factors (including those listed in Table 3-2) may be considered when determining a stipend amount.





Project Value	Percent Compensation Range	Compensation Range
\$5M - \$20M	(0.0025 - 0.0030) *Estimate	\$12.5K - \$60K
\$20M - \$50M	(0.0018 - 0.0020) *Estimate	\$36K - \$100K
\$50M - \$100M	(0.0012 - 0.0015) *Estimate	\$60K - \$150K
>\$100M	(0.001 - 0.0012) *Estimate	>\$100K

Table 3-1: Design-Build Stipend Ranges

Table 3-2: Design-Build Factors that Influence Stipend Amount

Variable	Discussion	Impact
Project Size	The cost of preparing a proposal is somewhat a function of the size of a project. However, there are considerable fixed costs that are not related to project cost.	There is an inverse relationship between stipend amount and project size. The smaller the project, the larger the stipend is relative to the overall project size (i.e., small projects tend to have a larger percentage of project cost stipend versus a large project).
Technical Complexity	Projects that require technically complex solutions require more work on the part of the proposer, which increases the cost of preparing the proposal.	RFPs requiring the proposer to address complex technical issues will lead to a higher percentage stipend.
Financial Complexity	Projects that require financially complex solutions require more work on the part of the proposer, which increases the cost of preparing the proposal. This is not generally a factor for DB projects.	RFPs requiring the proposer to address complex financial issues will lead to a higher percentage stipend.
Risks Transferred	The more project risk that a proposer is asked to assume will lead to greater proposal costs since the proposer will need to develop approaches to mitigate these risks. These mitigation techniques may or may not be disclosed to the Department.	The more risk that is transferred to a proposer will lead to a higher percentage stipend.
Information Required of the Proposer	The extent of information required in a proposal could have an impact on proposal development costs. As a result, the Department needs to be careful that information requested is of value in making a selection or is required by the applicable statute.	The more extensive the requirements of the proposal, the higher the stipend should be as a percentage of project costs.
Competition	If the stipend is considered insufficient by proposers relative to the variety of elements required to submit a proposal, some proposers may drop out of the competition, or may not even submit qualifications. In making a decision to submit a proposal, a proposer has to weight a number of factors, including: • Type of project • Probability of being awarded the project • Cost of preparing a submittal(s) • Size and type of project • Specific project requirements • Stipend amount • Current and projected workloads	Larger stipends tend to encourage more proposers, leading to greater competition. Greater competition benefits the project both in terms of better pricing, more innovative technical solutions, and greater public confidence in the process.
Market	In tough construction markets, when there is not a lot of work available, proposers are often more aggressive in project pursuits. This includes the willingness to accept lower stipends. Conversely, in good markets with a	In slower construction markets, the Department can offer lower stipends; in a robust construction market, the Department may need to offer higher stipends to foster adequate competition.





Variable	Discussion	Impact
	lot of work, proposers can afford to be choosier about the projects they pursue or do not pursue.	
Quality of Proposals	All things being equal, larger stipends tend to generate better proposals. In essence, stipends are sometimes viewed as supplemental funds that allow more resources to be expended on a proposal.	Higher stipends tend to lead to higher quality and more fully developed proposals.

The amount of the stipend compensation is based upon the estimated proposal development cost and the degree of engineering design required during the procurement process. The actual compensation may vary depending on the nature of the work, size and complexity of the project, risk exposure, technical and financial expertise required, market conditions, and the value of the work product to the Department. The Department could identify an amount more or less than the stipend range to enable proposers to provide the best value.

Any reimbursement is payable in the manner set forth in the RFP. As a general approach, such payment is typically be made no later than the execution date of the contract.

3.2.3 Preparing and Issuing a Request for Qualifications

The RFQ is used in the qualification step of the two-step procurement process. The purpose of the RFQ is to solicit interested teams (proposers) to submit an SOQ that used to assess proposer qualifications and information that may include capabilities, organizational structure, firm experience, key personnel experience, financial strength, and past performance. An RFQ may also seek the proposers' preliminary thoughts on approach, risks, and scope of work. Additional information, if any, about the project and such other details and information that are desirable to the Department can be included in the RFQ.

Figure 3-4 illustrates the Solicitation Phase process, including both the RFQ (Step 1) and RFP (Step 2) processes. Each process is detailed further in the following sections.







Figure 3-4: Design-Build Solicitation Phase Process

3.2.3.1 Issuing a Request for Letters of Interest

The purpose of a Request for Letters of Interest (RLOI) is to gauge potential interest and provide early industry notification of a project to allow prospective proposers to begin teaming arrangements, financial arrangements, and preliminary investigative work.

Preparation and Review

The RLOI is an optional process during the Solicitation Phase. The PPM may request the use of an RLOI. If requested, the PM oversees the preparation of the RLOI, which is reviewed and distributed by the Agreement Service members of the PAT.

Content and Time Frame for Response

The RLOI content may include the general project objectives, location, schedule, estimated budget, and scope. The time frame for responding to the RLOI is at the sole discretion of the PM.

3.2.3.2 Advertising a Project by Request for Qualifications

The goal of any advertisement is to distribute the materials, in this case an RFQ, to as many firms in the industry as possible.





Advertisement Requirements

Pursuant to NRS 408.3883(1), the PAT is to advertise for SOQs "in a newspaper of general circulation" in Nevada, and the announcement must include the information described pursuant to NRS 408.3883(2). If the Department issued an RLOI, the PAT issues the RFQ to those firms that submitted a Letter of Interest (LOI), as well as to any firms requesting the RFQ in response to an advertisement. RFQs may also be posted on the Department's website.

Time Frame for Response

When establishing deadlines for SOQ submittal, the Department should allow adequate time for potential proposers to form teams, seek clarification, and prepare a response in the form of an SOQ, as well as for the Department to issue any necessary addenda. As ultimately determined by the Department, this timing typically ranges from 30 to 60 days based on complexity and size of the project.

3.2.3.3 Composing a Request for Qualifications

The RFQ provides information for potential proposers to understand the project and provide an SOQ demonstrating that they are capable of delivering the project consistent with the Department's goals. Table 3-3 lists the typical components of an RFQ. The following sections briefly expand on some elements of the RFQ.

Table 3-3: Typical Design-Build Request for Qualifications Contents

Request for Qualifications – Primary Elements
Primary narrative describing project, SOQ submittal requirements, and evaluation criteria
 Project Goals Project Description (e.g., length of the facility, roadways included in the construction, major interchanges, and
connectivity) and General Location Procurement/Project Schedule and Milestones
 Description of Procurement Process Evaluation Process and Criteria/Weightings
 Request for Clarification Process SOQ Submittal Requirements and Formatting
Protest Procedures Department Pights and Disclaimers
Bequest for Qualifications Forms
Typical forms provided in the RFQ to ensure consistency in the information provided by the potential proposers
 Acknowledgement of Receipt
 Department and/or Past Project Descriptions
 Subcontractor Information Proposor's Organization Information
 Principal Participant and Major Participant Certification
 Proposed Key Personnel Information
 Past Performance
 Safety Questionnaire
REO Comment Form

- Uniform Affidavit of Certification for Preference Bidding (non-federal-aid projects only)





Statement of Qualifications Submittal Requirements

The PM and the PMT are to establish specific requirements related to the timing, format, page limitations, and quantities for an SOQ submittal. Additionally, each proposer is to complete specific forms that are appended to the RFQ. Although subject to change to accommodate project-specific issues, Table 3-4 details the typical structure and contents of an SOQ.

Table 3-4: Typical Design-Build Statement of Qualifications Contents

 Cover letter Section 1: Legal Proposer Organization Principal Participant and Major Participant Certification Notarized Power of Attorney for each Principal Participant Section 2: Financial Surety Letter from surety or insurance company with appropriate rating Volume II Contents Section 1: Design-Build Plan and Organization Proposed plan to manage design and construction Identification of issues and risk Risk and issue management Organizational chart Section 2: Qualifications of Key Personnel Proposed Key Personnel information Key Personnel work commitments Key Personnel resumes Section 3: Experience and Past Performance of the Proposer Firms Narrative regarding knowledge of the codes, standards, and development processes used by the Department, local jurisdictions, and other critical stakeholders to effectively manage all aspects of the contract in a quality. timely and effective manager
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contracting quarty, and oncouve manner
Department and/or Past Project Description
 Subcontractor Information
Past Performance Questionnaire
 Section 4: Safety
 Safety Program narrative
 Safety Questionnaire
 Section 5: Bidder's Preference (only used if not a federal-aid project)
 Certificate of Eligibility to receive a preference and signed affidavit

Minimum Qualifications and Experience Requirements

Qualifications of the firms comprising the proposers and identified key personnel may include certain minimum requirements (e.g., a certain number of years of experience and required certifications/licenses). Additionally, the RFQ may list minimum thresholds for construction and design firm experience related to contract value/construction value to ensure adequate experience on similar projects.

The PM and PMT are to consider the extent of the qualifications and experience required to be commensurate with the complexity of the project. Additionally, the RFQ may require submittal of certain financial information from the proposer. The intent of





financial qualification submittal requirements is to ensure that the proposer has enough financial capacity to assume the responsibilities and obligations required to complete the project.

Evaluation Criteria

Evaluation criteria for the RFQ must be relevant to assess the proposer's experience, qualifications, and ability to successfully execute the project. Additionally, the evaluation criteria must be clearly stated and should be as objective and measurable as practicable. Typical evaluation criteria and associated objectives for each are as follows.

- Design-Build Plan and Organization: Ability to demonstrate a general understanding of and plan to manage the design, construction, and technical issues and risks associated with a DB project, as well as a clear definition of the functional relationships of the proposer's team and its key personnel.
- Qualifications of Key Personnel: Identification of key personnel who have availability, demonstrate teamwork, and exhibit relevant experience in managing, designing, and/or constructing projects of similar size and complexity to that of the project.
- Experience and Past Performance of Proposer Firms: Identification of the best design and construction firms available with demonstrated experience and a record of producing quality work on Department projects and other projects similar in size and complexity to the project (notably in how a proposer's experience relates to DB or other alternatively delivered projects); proposers who effectively manage all aspects of the contract in a quality, timely, and effective manner; and, proposers with firms without a history of legal, financial, safety, quality, and timeliness problems that could adversely impact the project.
- **Safety**: Identification of proposers with proven safety records/practices and avoidance of proposers with a history of safety problems.
- Bidder's Preference (only applicable for non-federal-aid projects): Identification of proposers entitled to receive a five percent (5%) bidder's preference pursuant to NRS 408.3885(2) and NRS 408.3886(2).

3.2.3.4 Preparing a Request for Qualifications Evaluation and Selection Plan

Prepared by the PMT, the purpose of the RFQ Evaluation and Selection (E&S) Plan is to establish a disciplined, fair, and uniformed approach for evaluating and shortlisting the SOQs. Additionally, the RFQ E&S Plan aligns the QET and QSC by providing guidance to reinforce understanding of the process/criteria used when evaluating each SOQ.

General Contents of the Plan

The RFQ E&S Plan describes:

- The SOQ evaluation and shortlisting process and general procurement rules, including issues related to confidentiality and conflicts of interest.
- The PRT's organization, functions, general procedures, roles and responsibilities, and schedule.





• Evaluation criteria (from the RFQ).

Review and Approval of the Plan

The PPM is to review, and the Selection Official is to approve, the RFQ E&S Plan prior to issuance of the RFQ.

3.2.3.5 Issuing a Request for Qualifications

Prior to issuance of an RFQ, the Department conducts extensive internal reviews with its internal legal counsel, the PAT, and Service Providers (if applicable). Following completion of the RFQ reviews, the PPM compiles the RFQ evaluation criteria pursuant to NRS 408.3883(2) and recommends selection of the E&S committees, submitting both to the Selection Official for approval. The PPM also requests approval from the Selection Official to proceed with issuance of the RFQ. After receiving this approval, the PM notifies the PRT of qualification evaluation timelines. Within this request, an insurance recommendation for the project must be included.

3.2.3.6 Conducting an Industry Workshop

The Department may host an Industry Workshop after advertisement of the RFQ. If an RLOI is issued, the Industry Workshop may occur prior to the advertisement of the RFQ. The purpose of the workshop is to provide a brief overview of the procurement process, introduce the project to the industry, and consider any industry questions and comments presented. The determination of whether to hold an Industry Workshop is a project-specific decision at the PPM's discretion. The PM prepares and delivers a presentation of information describing the project and procurement process at the workshop.

3.2.3.7 Issuing Request for Qualifications Clarifications and Addenda

Upon issuance of the RFQ, proposers may submit questions and request clarifications regarding the RFQ. The Department is to establish a deadline for questions to be submitted; this deadline is to provide enough time for the proposers to adjust their SOQs to accommodate any responses.

A proposer is to provide requests for clarifications as directed in the RFQ, and the Department's formal responses are provided to any non-confidential requests to all potential proposers (typically through the Department's website).

It may be necessary to issue addenda to the RFQ in response to proposer questions to clarify requirements, correct errors, or provide supplemental information. The intent of the addenda process is to provide formal responses and changes that refine the RFQ in advance of the SOQ due date. The Department may provide redline markups of the RFQ as part of an addendum.

3.2.3.8 Evaluating the Statements of Qualifications

Upon receipt of the SOQs, the PAT is responsible for logging SOQs, completing a compliance check to confirm responsiveness, and conducting a pass/fail check. The QSC leads the evaluation of the SOQs, with assistance from the QET and the PAT. The QET and QSC members individually evaluate each SOQ based on the evaluation criteria set forth in the RFQ. The QET and QSC then meet independently to develop consensus ratings for each criterion, with the PAT documenting the results of the QSC.





3.2.3.9 Shortlisting

Pursuant to NRS 408.3885(1), the Department must shortlist between three and five proposers. If the Department does not receive three SOQs that it determines to be qualified, the DB procurement is canceled.

Once the QSC has evaluated the SOQ and recommended the shortlist, the Selection Official is to take one of the following actions:

- Accept the QSC's shortlist recommendation.
- Request that the QSC conduct further analysis and reconsider its respective findings and/or recommendations.
- Reject the QSC's shortlist recommendation.

3.2.4 Preparing and Issuing a Request for Proposals

The RFP is used in the proposal step of the two-step procurement process. The purpose of the RFP is to define performance and cost requirements for all shortlisted proposers to be able to submit a responsive technical proposal and price proposal in accordance with the ITP. The RFP includes the ITP, the Contract, the Technical Provisions, and the RIDs. The PM and team are to finalize the RFP prior to approval by the PPM and FHWA (if federally funded or requiring FHWA involvement).

Additionally, the Contract, Technical Provisions, and portions of the RIDs explicitly identified as contractual become the parts of the contract documents to be executed and used for the Contract Administration Phase. The contract defines the order of precedence to resolve any conflicts among the various contract documents.

Figure 3-4 illustrates the Solicitation Phase process that depicts the general RFP (Step 2) process.

3.2.4.1 Composing a Request for Proposals

Table 3-5 details the typical content for various RFP documents. Key elements of the RFP are described in subsequent sections.





Table 3-5: Typical Design-Build Request for Proposals Documents

Instructions to Proposers (ITP)

Provides instruction on the RFP procurement process. Key elements include:

- Project Goals
- General Scope of Work
- Procurement Schedule
- Contact and Communications Rules
- Conflict of Interest Considerations
- Site Access and Third-Party Coordination Details
- ATC Submittal Requirements
- General Format and Responsiveness/Pass-Fail Requirements
- Evaluation and Selection Process Overview
 Technical Proposal Submittal Requirements
- Price Proposal Submittal Requirements
- Award and Execution Process
- Protest Procedures
- Department Reserved Rights
- Required Proposal Forms
- Department-Assigned Duration to Substantial Completion

Design-Build Contract (and Appendices)

Defines the contractual relationship between the Department and Design-Builder throughout the design, construction, warranty, and closeout phases of the project. Key elements include:

- Components; Interpretation of Contract Documents
- Obligations of Design-Builder
- Information Supplied to Design-Builder
- Timeframe, Schedule, and Progress
- Control of Work
- Access to Site; Utility Adjustments; Environmental Mitigation; Cooperation with Local Agencies
- Subcontractors and Labor
- Performance and Payment Bonds
- Insurance
- Site Security; Maintenance and Repair, Title
- Warranties

- Payment for Services and Changes in the WorkSuspension, Termination for Convenience, & Default
- Liquidated Damages; Failure to Open Lanes
- Limitation of Liability and Indemnification
- Partnering and Dispute Resolution
- Acceptance
- Documents and Records
- Value Engineering
- Cooperation and Coordination with Other Contractors and Adjacent Property Owners
- Miscellaneous Provisions
- Supporting Appendices to the Contract

Technical Provisions (and Attachments)

Specifies the technical requirements by which the project is to be designed, built, and maintained, as appropriate. Key elements include:

- General Scope of Work
- Quality Management System (QMS)
- Design Quality Management
- Construction Quality Control, Oversight, Acceptance
- Landscape and Aesthetics
- Public Involvement
- Environmental
- Drainage
- Roadway
- Pavement
- Traffic
- Maintenance of Traffic

- GeotechnicalStructures
- Signals and Lighting
- Signs and Pavement Markings
- Railroad Coordination
- Utilities
- Intelligent Transportation Systems (ITS)
- Maintenance Requirements
- ROW Acquisitions
- Stormwater Quality
- Submittals
- Standards and Reference
- Supporting Attachments to the Technical Provisions

Reference Information Documents (RIDs)

Provides information for all proposers/Design-Builder; use of RIDs is at the proposer's/Design-Builder's sole risk, unless otherwise noted in the Contract. Key elements could include:

- Preliminary Plans and Details (e.g., Reference Design)
- Preliminary Drainage Reports and Related Information
- Utility Information (e.g., potholing data, maps) and the Utility Impact Matrix
- Relevant As-Built Documents (e.g., Third-Party, Utilities)
- Standards and References

- Geotechnical Data Report and Related Information
 NEPA Documents (e.g., CatEx, EA/FONSI, EIS/ROD)
- NEPA Documents (e.g., Calex, EA/FONSI, EIS/ROI
 Planned ROW Limits, including the ROW Figure
- Flatmed ROVV Limits, including the ROVV Fig
 Traffia Analysis Information
- Traffic Analysis Information
 Third Darty Agreements and F
- Third-Party Agreements and Plans
- Hazardous Material Information





Instructions to Proposers

The purpose of the ITP is to establish the rules and procedures that proposers must follow when preparing and submitting their proposals. In addition, the ITP generally defines how the Department reviews and evaluates the proposals when selecting the preferred proposer.

This document typically includes:

- General information identifying the goals, owner, and location of the project, contents of the RFP package and function of the ITP in terms of submittal organization and requirements, the procurement schedule and process, an overview of the proposal evaluation process, Disadvantaged Business Enterprise (DBE) and Equal Employment Opportunity (EEO) requirements, and other pertinent provisions (e.g., protest procedures, state, and Department rights and disclaimers).
- Technical proposal submittal instructions that address requirements for a proposer's design, construction, schedule, and project management approach. Elements that may be required include a proposer's preliminary roadway schematic, preliminary baseline schedule, lead personnel resumes, and organizational structure.
- Cost proposal submittal instructions that convey requirements for delivery of a price proposal. Elements described may include a proposed payment schedule (e.g., maximum payment curve), breakdown of prices or schedule of values to facilitate price evaluation and contract administration, various cost and pricing supporting data, and contingency items or allowances.
- The ATC submittal requirements describing the Department's review process and submittal schedule, the required contents for ATC submittal, ATC restrictions that focus proposer efforts on specific areas where design flexibility and potential innovative solutions are encouraged, and confidentiality guidelines.
- Site access requirements, also detailed in a Site Access Letter, that ensure equal access to all proposers without unduly impacting the public.
- Stipend details concerning the stipend amount, conditions to qualify for stipend payment, and the stipend payment process. The inclusion of a stipend and the details regarding payment of a stipend are subject to the sole discretion of the Department.
- Proposal forms conveying necessary information for both state and federally funded projects. Forms include the stipend agreement, cost proposal forms, bonding forms, DBE utilization forms, and Escrow Proposal Document (EPD) agreements.

Contract

The purpose of the Contract and related Appendices is to provide the terms and conditions between the Department and Design-Builder that govern the design and construction of the project. Although subject to change to accommodate project-specific conditions, <u>Appendix F</u> shows an example risk allocation summary and is used by the Department in combination with other available resources to address contract risks.





Technical Provisions

The intent of the technical provisions and related attachments is to provide the requirements and performance specifications to manage, design, and construct the project. The proposers are to develop their technical proposal and price proposal with consideration of these technical requirements and performance specifications. As such, the technical provisions must be clear and comprehensive to reduce potential for disputes or change orders during the Contract Administration Phase. The majority of the technical provisions address specific technical disciplines and are typically organized into five sections.

- **General**: Provides an overview of the Department's specific goals for the respective discipline related to implementing and maintaining the project.
- Standards and References: Conveys the applicable requirements of the contract documents that generally include references to the project standards, good industry practice, governmental approvals/rules, and specific criteria defined for the identified discipline, as well as any related attachments.
- Design Requirements: Provides the specific design-related performance specifications and engineering criteria, along with information regarding the specific scope for the identified discipline.
- Construction Requirements: Provides the specific construction-related performance specifications and construction criteria for the identified discipline.
- **Submittals**: Presents the design, construction, and other related submittals for the identified discipline.

Additionally, the technical provisions include various sections to address the general scope of work, project management, and quality control and quality assurance (QC/QA) tasks for both the Department and the Design-Builder.

Reference Information Documents

To help the proposers better understand and bid the project, the Department may include a number of RIDs in coordination with the RFP. Unless the Department explicitly defines a requirement in the contract documents by referencing a RID or portion of a RID, the Design-Builder cannot rely on the information in the RIDs.

As listed in Table 3-5 and in a RID Outline Index, the RIDs may include Department manuals (e.g., the Department's <u>Standard Specifications</u>, <u>Standard Plans</u>, <u>Construction</u> <u>Manual</u>), geotechnical investigations, utility strip maps or reports, a Utility Impact Matrix, hazardous materials investigations, environmental documents and decisions, the Reference Design, and any applicable agreements (e.g., railroad and utility agreements).

3.2.4.2 Issuing a Draft Request for Proposal

As an option during the Solicitation Phase and subject to the approval of the PPM, the Department may issue a draft RFP for industry review to gather initial feedback on the RFP and allow the proposers an early look at the project details, contract terms and conditions, and technical requirements. The draft RFP generally consists of a draft ITP





(including technical and cost submittal requirements, evaluation criteria, and a procurement schedule), a draft form of the Contract, draft Technical Provisions that describe the project scope and related technical requirements, and certain RIDs that are available at the time of publishing. The Department also develops an Industry Review Letter to be issued prior to the draft RFP. This letter details proposer communication protocols, meeting schedules, early ATC submittal considerations, protest procedures, and/or site access opportunities.

Internal Review and Approval

Prior to issuance of a draft RFP for industry review, the Department conducts extensive internal, cross-discipline reviews with its technical leads, internal legal counsel, Agreement Services/PAT members, and Service Providers (as applicable). As requested by the PPM, the Selection Official approves the release of the draft RFP to all shortlisted proposers, with specific consideration for the following:

- Major risk issues and contract risk allocations.
- Project scope, budget, and funding source.
- Target procurement schedule.
- Target NEPA, ROW, and utility relocation schedule/approach.
- Type of procurement.
- Technical proposal evaluation approach.
- Inclusion of ATCs.
- Construction schedule.
- Payment approach.
- Early completion incentives (if applicable) and liquidated damages/charges.
- Key MOT limitations.
- Public relations approach.
- Insurance requirements.

3.2.4.3 Industry Review

The intent of industry review is to provide the Department with valuable feedback to improve the quality of its procurement documents, clarify requirements of the RFP, and resolve potential issues in the RFP. It also gives a proposer an early look at the project's scope and technical details so that it has additional time to develop its proposal. If the schedule allows for it, inclusion of an industry review process is encouraged. If used, the industry review process generally occurs after shortlisting, but before formal issuance of the final RFP, with the following process facilitated through the PAT.

Industry Review Meeting

Led by the PM, the PMT may hold an Industry Review Meeting with all the shortlisted proposers. The goal of this meeting(s), whether held jointly or as one-on-one meetings, is to share information regarding the upcoming RFP and to obtain feedback, comments,





and suggestions from the proposers. This information could include procurement and project schedule status updates, changes in scope, and/or status of risks that have been mitigated by the Department, in addition to general project details and next steps in the procurement process. A member of the PAT is to be present during the meetings and is consulted about what can and cannot be discussed during the meetings. One-on-one meetings generally are confidential, and the information/questions from a proposer (e.g., discussion on concept or full ATCs) remain confidential throughout the procurement process.

Additionally, the Department may allow proposers to meet with certain utilities, railroads, third-parties, or other permitting agencies that are in and around the project area.

The Department may also organize other workshops (e.g., a DBE Presentation) to provide additional information to the industry. The Department reserves the right to participate in any such meeting; however, the Department's representative is not to actively answer any questions during the meeting.

Preparing for the Industry Review Meeting

All shortlisted proposers are required to submit an agenda and topics for discussion in accordance with the ITP. Whether held jointly or one-on-one, the PAT prepares waivers and protocols to be executed at the meeting.

Post Meeting Follow-Up

A proposer is to provide its questions and comments in accordance with the ITP. However, the Department is not obligated to respond to any questions from the Industry Review Meeting formally. It is the Department's option to provide formal responses to any non-confidential questions received, and if the Department does respond, responses are made available to all shortlisted proposers. Alternatively, additional draft RFP versions or the final RFP redline markups may serve as the Department's response to proposer questions and comments.

3.2.4.4 Issuing a Final Request for Proposals

The Department is to issue a final RFP that consists of an ITP (including technical and cost submittal requirements, evaluation criteria, and procurement schedule), a draft form of the Contract, refined Technical Provisions that describe the project scope and related technical requirements, and a complete list of RIDs available at the time of publishing.

Internal Review and Approval

Prior to issuance of a final RFP, the Department conducts extensive internal, crossdiscipline reviews with its technical leads, internal legal counsel, Agreement Services/PAT members, and Service Providers (as applicable).

Based on the project's scope of work, complexity, and technical needs, the PPM, with the input of the PMT, submits a request for approval of the RFP evaluation that includes committee selection, criteria, and scoring to the Selection Official for approval. Upon approval, the PM coordinates with the PMT to issue the final RFP.





Federal Highway Administration Approval

Following Selection Official approval, if the project is federally funded or requires FHWA involvement, the PM is to obtain FHWA's approval pursuant to 23 CFR 635.309(e) and request RFP release for the final RFP. Note that draft RFPs may be issued without FHWA approval.

Processing Memo

The Processing Memo is intended to provide information (e.g., important tasks and dates) about the project to all involved parties in the Department and is used for the purpose of obligating funds.

Issuance

Following completion of any industry review process (if used) and once all approvals are received, the PAT issues the final RFP to all shortlisted proposers. Only shortlisted proposers are eligible to receive and respond to the RFP.

3.2.4.5 Submitting and Reviewing Alternative Technical Concepts

An ATC is defined as a deviation from the requirements of the contract documents that result in performance, quality, and utility of the project that is equal to or better than the performance, quality, and utility of the project absent the deviation.

At the Department's discretion, the Department may consider pre-proposal ATC submissions in the form of concept or full ATC submittals. In allowing the Department to offer early feedback on a submitted ATC and obtain pre-approval during proposal preparation, the proposer can efficiently manage its resources and focus its energy in developing a responsive proposal using solutions that are in the best interest of the project.

Alternative Technical Concept Confidentiality

The Department maintains the confidentiality of ATCs and all communications regarding ATCs in accordance with the ITP. However, if the Department determines, based on a proposed ATC or otherwise, that the RFP contains an error, ambiguity, or mistake, the Department reserves the right to modify the RFP to correct the error, ambiguity, or mistake, regardless of any impact on a proposed ATC, without breaching its obligation to confidentiality.

Alternative Technical Concept Considerations

In the past, the Department has accepted ATCs on different configurations, design criteria, or materials not previously used on Department projects. The ITP may allow submittal of any type of ATC or limit the type or number of ATCs submitted (e.g., not allowing ATCs related to pavement design or not allowing ATCs that require further environmental evaluation). A proposer can suggest an ATC during the proposal preparation period and, if accepted, can then decide to include the ATC in its proposal as its "base proposal." While a proposer is not required to use an approved ATC, the proposer would still need to submit a proposal that meets the requirements of the technical provisions.





Alternative Technical Concept Review Process

The Department will reject any ATC submission that does not contain the information required per the ITP. For all responsive ATC submissions, the Department conducts a formal review to determine whether to reject the ATC, accept the ATC, or accept the ATC with specified conditions that the proposer must meet before using the ATC (this includes the proposer/Design-Builder bearing the risk of satisfying all noted conditions). The Department can reject an ATC at any time and for any reason. The PAT is to ensure that all ATCs approved by the PMT are forwarded to the PRT, along with a technical memorandum outlining any pertinent notes, special conditions, or items of interest concerning the ATC to be used during the Evaluation Phase.

3.2.4.6 Issuing Request for Proposals Clarifications and Addenda

Starting with final RFP issuance, proposers may submit questions and request clarifications regarding the RFP. The Department is to establish a deadline for questions. This deadline is to provide a reasonable length of time for the proposers to review the final RFP or addenda and adjust their proposals to accommodate any responses.

A proposer shall provide requests for clarifications as directed in the ITP. Formal Department responses are provided to all shortlisted proposers.

It may be necessary to issue formal addenda to the RFP in response to proposer questions, to clarify requirements, to correct errors, or to provide supplemental information. The intent of the addenda process is to provide formal responses and changes that refine the RFP in advance of the proposal due date and Evaluation Phase. FHWA approval of the addenda is required for projects that are federally funded or require FHWA involvement.

Overview of a Final Request for Proposals One-on-One Meeting

Led by the PM, the PMT may hold one or more final RFP one-on-one meetings with all shortlisted proposers. The goal of this meeting(s), like the draft RFP Industry Review Meeting, is to share updated information regarding the project and to obtain feedback, comments, and suggestions from the proposers for further refinement to the RFP via addendum. A member of the PAT is to be present during the meetings and is consulted about what can and cannot be discussed during the meetings. One-on-one meetings generally are confidential, and information/questions from a proposer (e.g., discussion on an ATC) remain confidential throughout the process.

At this time, the Department may organize additional meetings with certain utilities, railroads, third-parties, or other permitting agencies or interested parties that are in and around the project area. The Department reserves the right to participate in any such meeting; however, the Department's representative does not actively answer any questions during the meeting.

Meeting Preparation

All shortlisted proposers are to submit an agenda and topics for discussion in accordance with the ITP. The PAT prepares waivers and protocols to be executed at the





meeting, which is similar in form and content to that prepared for the draft RFP Industry Review Meeting.

Post Meeting Follow-Up and Addenda Release

A proposer is to provide any questions and comments in accordance with the ITP. The Department then provides formal responses to any non-confidential questions received, which are made available to all shortlisted proposers. Additionally, the Department may provide redline markups of the final RFP or addendum to supplement the Department's formal responses.

Section 3.3 Procurement Process: Evaluation Phase

Figure 3-5 illustrates the Evaluation Phase process, which is detailed further in the following sections.



Figure 3-5: Design-Build Evaluation Phase Process

3.3.1 Evaluation Phase Roles, Responsibilities, and Organization

Building on the roles and responsibilities of the Department's staff involved in the procurement process, the Evaluation Phase includes many of the same key individuals, committees, and support team members. Expanded upon in the RFP E&S Plan, the primary roles and associated responsibilities for key individuals, teams, and committees distinct to the Evaluation Phase are addressed below.

Pioneer Program Director (Deputy Director/Chief Engineer) See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Selection Official

The Selection Official (Department Director or Deputy Director as designated) is responsible for:

 Overseeing the initial appointments and replacements of members of the Technical Evaluation Committee (TEC), Proposal Selection Committee (PSC), Price Proposal Committee (PPC), PAT, Observers, and Service Providers.





- Approving the evaluation and selection process and plan for evaluating the proposals.
- Determining the participation levels of individuals who may have a potential conflict of interest, including ending or prohibiting an individual's participation in the evaluation and selection process or imposing mitigation for such conflicts or relationships to ensure a fair evaluation and selection process.
- Accepting or rejecting the recommendation of the PSC. If rejected, the Selection Official may direct the PSC to reevaluate the proposals.

Project Management Team

The PMT members include the PPM; Assistant Chief, Project Management; PM; the PAT; and Service Providers during the Evaluation Phase.

Pioneer Program Manager (Chief, Project Management) See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Assistant Chief, Project Management See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Project Manager

The PM is responsible for:

- Maintaining the DB procurement schedule.
- Overseeing Service Providers to support the RFP evaluation and selection committees.

Procurement Administration Team See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Service Providers See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Project Review Team

During the Evaluation Phase, the PRT includes the TEC, PSC, PPC, and Observers. Roles for each of the team members are described below. The PRT involves Department representatives and may include representatives from affected local, state, and federal agencies, each having expertise to support Evaluation Phase activities. At the discretion of the PM and with approval by the PPM, the Department may also engage Service Providers to support the PRT's efforts.

Technical Evaluation Committees

The TEC reviews and evaluates all responsive proposals, providing recommendations to the PSC.

Proposal Selection Committee

The PSC reviews all responsive proposals and considers the findings of the TEC when recommending the scoring and ranking of proposers to the Selection Official. This includes the recommendation of a best value/preferred proposer.





Proposal Price Committee

The PPC is an independent committee that reviews the price proposal for balance and calculates each price proposal score using an established formula in the ITP.

Observers

See <u>Section 3.2.1</u> – Similar role in the Evaluation Phase.

Advisory Team

<u>Section 3.2.1</u> includes a description of roles of the Advisory Team, which have similar roles in the Evaluation Phase with a focus on providing information or clarification for any questions or concerns raised by the PRT.

3.3.2 Preparing a Request for Proposals Evaluation & Selection Plan

Prepared by the PRT, the purpose of the RFP E&S Plan is to establish a disciplined, fair, and uniformed approach for evaluating and ranking each proposal. Additionally, the RFP E&S Plan and supporting orientation materials align the TEC, PSC, and PPC by providing guidance on the process/criteria used when evaluating each proposal.

General Contents of the Plan

The RFP E&S Plan describes:

- The proposal evaluation and ranking process and general procurement rules, including issues related to confidentiality and conflicts of interest.
- The PRT's organization, functions, general procedures, roles and responsibilities, and schedule.
- Evaluation criteria (from the ITP).

Review and Approval of the Plan

The PPM is to review, and the Selection Official is to approve, the RFP E&S Plan prior to issuance of the final RFP.

3.3.3 Orienting and Training on the Evaluation and Selection Process

With a goal of ensuring a disciplined, fair, and uniform E&S process, the PM, supported by assigned PAT and Service Providers, leads training to orient the PRT (PSC, TEC, and PPC) on the E&S process. This training should be done as close to the proposal due date as possible.

3.3.4 Evaluating Proposals

The proposal evaluation process is driven by three steps:

- 1. Pre-screening of proposals based on responsiveness and pass/fail criteria.
- 2. Evaluating the technical proposals.
- 3. Calculating the price proposal score.





3.3.4.1 Prescreening Proposals: Responsiveness and Pass/Fail

The purpose of the pre-screening completed by the PAT is to both validate the responsiveness of the proposals and that all pass/fail requirements are met for those proposals received by the proposal due date.

Pre-Screen Considerations

The pre-screening determines whether the requirements of form, time of submittal, and basic information as specified by the ITP are included. Such information includes:

- Separating the technical proposal (i.e., Technical Proposal Delivery Plan) from the sealed price proposal.
- Conforming to the format and page requirements detailed in the ITP.
- Completing (including proper execution) all forms provided in the ITP.
- Including the DBE and Workforce Diversity plan outlines.
- Providing the appropriate insurance certificates and surety commitment letters.
- Properly completing all pricing forms and executing bonding information.

Review and Validation Results

The PAT may recommend a proposal be rejected if it does not comply with the above requirements, is not properly signed by the proposer's authorized representative, or otherwise is not responsive to the ITP requirements. At the Selection Official's discretion, the PAT may waive any minor deficiencies in a proposal, allow a proposer to correct minor deficiencies or clarify/supplement the proposal, or reject a proposal that does not pass the pre-screening process. The PAT reports to the Selection Official regarding the results of the pre-screening process.

3.3.4.2 Evaluating and Scoring the Technical Proposals

The objective when evaluating and scoring the technical proposals is to identify proposals that exceed stated requirements/objectives in a beneficial way, providing advantages, benefits, or added value to the project through a consistently outstanding level of quality in the proposal's presentation.

Evaluation Process

After completing the pass/fail and responsiveness review of the technical proposal by those on the PAT responsible for reviewing the technical proposals, the PSC, with assistance from the TECs and other advisors, evaluates each proposal consistent with the RFP E&S Plan, technical proposal submittal requirements, and the adjectival assessment levels detailed in the ITP. The PRT is to consider full or conditionally approved ATCs incorporated into the technical proposal when evaluating and scoring.

The PSC is to reach consensus on the technical proposal score before moving forward.





3.3.4.3 Calculating the Price Proposal Score

The PPC conducts an independent review and evaluation of each price proposal. After notice of intent to award, the Department may further negotiate with the best-value/preferred proposer if the Department believes a bid is unbalanced.

Review Process

After completing the pass/fail and responsiveness review of the price proposal by those on the PAT responsible for reviewing the price proposals, the PPC calculates the price score for each proposer.

Price Score Formula

The price score is established using the following formula:

Lowest proposal price submitted by any proposer \div proposal price of the proposal being evaluated x # of points assigned to the price proposal = Price Score

The Department then combines the price score and the technical proposal score to establish the best value proposer. In accordance with NRS 408.3886, the price score is to be at least 30 percent (30%) of the total point score.

3.3.4.4 Ranking Proposals and Recommending Selection

The RFP E&S process and price proposal calculation are documented in a written report that accompanies the PSC's recommendation to the Selection Official.

The Selection Official may accept the PSC's recommendation, ask for a reevaluation, or reject all proposals. If the Selection Official accepts the PSC's recommendation, the proposal may move forward for FHWA concurrence (if required) and ratification by the Board as part of the Award Phase. The Selection Official may also direct that proposal revisions, also called Best and Final Offers (BAFO), be considered.

3.3.4.5 Requesting Clarifications during Evaluation & Selection

To the extent provided in the ITP, the PSC and TEC may request clarification of certain proposal details and/or communicate with proposers (via the PAT/the Department's Authorized Representative) to better understand potential ambiguity, reasonable interpretation, or to facilitate the evaluation process. The PSC may elect to modify its scoring based on this communication, but only to the extent that it is consistent with the ITP and the RFP E&S Plan.

The Department only considers clarifications that provide a better understanding of a proposal and/or address any ambiguities or inconsistencies in a proposal. The Department does not consider information that changes the content of the proposal or provides additional/new information or material.

3.3.4.6 Developing a Best and Final Offer

Pursuant to NRS 408.3886, the Selection Official may direct the PRT at any time in the Evaluation Phase to start a BAFO process, where the PPM is to issue a BAFO, if the Department determines that no proposal received by the Department:





- Serves a public purpose.
- Satisfactorily achieves the project goals and needs for any reason, including the proposals:
 - Are not cost-effective.
 - Exceed budget amounts or cost estimates.
 - Identify technical or scope ambiguities in the RFP.

Figure 3-6 details the BAFO process.



Figure 3-6: Design-Build Best and Final Offer Process

Best and Final Offer Development Process

When preparing a request for BAFO, the PRT may:

- Hold individual or joint meetings or discussions, led by the PM, with identified proposers concerning the project.
- Modify the project scope.
- Modify the terms of the contract.
- Revise the project cost estimates.

Revise the criteria for evaluating the proposals and the relative weights assigned to that criteria.

The PAT may issue a request for BAFO to:

- Each proposer who submitted a responsive proposal that passed all responsive and pass/fail criteria.
- Only those proposers who submitted responsive proposals that pass all responsive and pass/fail criteria *and* are within the competitive range of the most highly rated proposals based on the initial proposal rankings considering all evaluation criteria.





The request for a BAFO is to set forth the date and time on which the BAFOs must be submitted to the Department. If issued, the PAT provides written notification to any proposer not within the competitive range as part of the BAFO process.

Evaluation and Ranking

After receiving the BAFOs, the Department is to evaluate the proposal revision using the same general process completed for the original proposals. In connection with its review of the BAFO, the PSC reviews the TEC's findings before submitting a report and recommendation to the Selection Official. After reviewing all BAFOs and any clarifications or additional information provided by a proposer pursuant to NRS 408.3886, the PSC may rank each responsive BAFO submitted, with the highest ranked proposal recommended to be the apparent best value/preferred proposer. The Selection Official may accept the PSC's recommendations regarding a BAFO or reject all BAFOs.

Section 3.4 Procurement Process: Award Phase

The process to complete the Award Phase is outlined on Figure 3-7 and detailed in the following sections.



Figure 3-7: Design-Build Award Phase Process

3.4.1 Award Phase Roles, Responsibilities, and Organization

The Department has established roles and responsibilities as part of the Award Phase to help negotiate and conform the contract documents and compile all contract documents for review, execution, and ratification. Figure 3-8 illustrates the organizational structure for this phase.





Pioneer Program Manager

The PPM oversees contract negotiations with the preferred proposer, ensuring integrity of the process, input into contract terms, and the review and approval of the negotiation summary report and prefinal contract (prior to execution).

Project Manager

The PM leads contract negotiations with the preferred proposer and oversees the conformance of the contract documents.

Construction Compliance Manager (Resident Engineer)

The Construction Compliance Manager (Resident Engineer) supports the contract negotiation process, with a focus on reviewing the preferred proposer's EPDs to ensure the cost and pricing data and related backup are adequate for negotiations of change orders during the Contract Administration Phase.



The PAT issues the notice of intent to award to all proposers which kicks off the Award Phase. The PAT then documents and tracks receipt of the required forms and documents (e.g., bonding, business licenses, certificates of insurance) from the preferred proposer.

Attorney General (Deputy)

The Attorney General reviews and approves the final contract as to its form and legality. The Attorney General is to be a signatory on the contract.

Service Providers

The Service Providers (technical, legal, and financial) provide additional support during the contract negotiation and conformance process.

Department Director

The Department Director (or designee) provides decisions regarding terms, conducts final review and approval of the negotiation summary report and final agreement, and is signatory on the contract.







Figure 3-8: Design-Build Award Phase Organizational Structure

Nevada Transportation Board

The Board, including the Chairperson of the Board, reviews the final contract and approves the Selection Official's recommendation to award and execute the contract. The Chairperson of the Board is to be a signatory on the contract.

Preferred Proposer

The preferred proposer, including the preferred proposer's PM, is an active participant in the contract negotiation and conformance process with the Department. The preferred proposer is to provide, within a timely manner, all required forms and documents (e.g., bonding, business licenses, certificates of insurance) that will be incorporated into the final contract. The preferred proposer is to designate an individual or individuals who are authorized to make decisions and bind the Design-Builder on matters relating to the contract documents. This individual(s) is to be a signatory on the contract.

3.4.2 Issuing a Notice of Intent to Award

The purpose of the Notice of Intent to Award is to make the industry aware of the Department's intent to negotiate and execute a contract with the preferred proposer. The PAT issues the notice to all proposers, which initiates the contract conformance/negotiation process.

3.4.3 Negotiating and Conforming a Contract

The PM and PPM lead negotiations with the preferred proposer's authorized representative(s). While the Department generally reserves the right to negotiate any aspect of the contract and proposal, generally, negotiations focus on:

- Incorporation of ATCs from the preferred proposer (and potentially the unsuccessful proposers).
- Minor modifications to project scope, risk allocation, cost and pricing backup documentation, or technical requirements.
- Inclusion of proposal commitments that exceed the minimum requirements of the contract documents.
- Changed circumstances that have occurred between the proposal due date and award.
- Any other minor changes or modifications.

Although the Department does not disclose the technical or price proposal contents from the other unsuccessful proposers during the negotiation and award process, the Department may use an ATC(s) from unsuccessful proposers who accepted a stipend pursuant to 23 CFR 636.113, if such intent is stated in the ITP. The Department and preferred proposer may negotiate the incorporation of these ATC(s), in whole or in part, into the project's scope or add these items to the project through a change order after contract execution.

If the Department cannot negotiate a satisfactory contract with the preferred proposer (as determined by PPM and approved by the Selection Official), the Department may suspend or end negotiations with the preferred proposer by notifying the proposer in writing of the Department's decision. The PM and PPM may then proceed to the next most highly ranked





proposer to finalize or attempt to negotiate a contract. This process may be repeated until the Department successfully negotiates a contract or elects, at its sole discretion, to terminate the procurement.

As part of the negotiation and contract finalization process, the Department, using the information provided by the preferred proposer, assembles the conformed contract documents that include the Contract, Contract Appendices, the Technical Provisions, the Technical Provision Attachments, certain RIDs, and components of the preferred proposer's proposal to be included in the contract.

It is during this time that the Department, led by the PM and Construction Compliance Manager, accesses and reviews the EPDs with the preferred proposer to understand how the proposer arrived at each of the listed items in the ITP. The Department's review is to assess the completeness and accuracy of the EPDs, and the Department may document items regarding negotiations, variances in the documents, completeness, and/or accuracy, which may be incorporated as an amendment to the EPDs and may be used in negotiating change orders and other price and schedule-related items during the Contract Administration Phase.

Contract execution then generally proceeds according to the Department's standard practice, and prior to executing the contract, the PM prepares a negotiation summary report for the PPM and Selection Official's review and approval.

3.4.4 Obtaining Federal Highway Administration Concurrence (as applicable)

For federally funded projects or projects requiring FHWA involvement, the PM is to request FHWA concurrence of the Department's intent to award the contract as required under 23 CFR § 635.309(e). The PM is to follow current Department processes for obtaining FHWA concurrence.

3.4.5 Issuing a Public Notice

Pursuant to NRS 408.3881, the Department is to publish public notice in a newspaper of general circulation in Nevada that it intends to hold a public meeting (typically the regular Nevada Transportation Board Meeting) at which the Board reviews and ratifies the Design-Builder selection in accordance with NRS 408.3886(6). NRS 241.020 also requires that the notice be published on the Department's website.

3.4.6 Reviewing and Ratifying at a Public Meeting

3.4.6.1 Transportation Board Preparation/Briefing

To provide the Board with details on the project and the contract negotiation process, the PM is to submit the following items to the Director's Office prior to the Board Meeting where the contract is to be reviewed and ratified (typically four weeks prior to the meeting).

- Standard Board memo from the Director to the Board that includes a project summary, background, and the following attachments:
 - Summary of the procurement process.





- PSC Recommendation Memo to the Selection Official.
- Summary of the contract, including:
 - The scope of work.
 - Innovation.
 - Project schedule.
 - Significant contract terms and conditions (incentives and disincentives).
- Justification/recommendation for which proposer is to receive the stipend.

The PM submits a copy of the final contract, ready for execution, to the Director's Office prior to the Board meeting.

3.4.6.2 Ratification

If the Department successfully negotiates a contract with the preferred proposer (pursuant to NRS 408.3886(6)), the intent of the public meeting/Board meeting is to:

- Review and ratify the selection and the execution of the contract.
- Partially reimburse the unsuccessful proposers if a stipend was provided for in the RFQ and RFP pursuant to NRS 408.3883.
- Make available to the public a summary setting forth the factors/criteria used by the Department to select the preferred proposer and the rankings of the proposers who submitted proposals or BAFOs (if applicable).

The selection of the best value proposer/proposal is not final until the Board has approved the recommendation.

3.4.7 Executing a Contract

Upon approval by the Board, the Governor (i.e., the Chairperson of the Board) is to execute the contract, alongside the Director, Deputy Attorney General, and the preferred proposer's authorized representative(s).

3.4.8 Debriefings

After conditional or final award of the contract, the PAT may offer debriefings to unsuccessful proposers, if requested. Such debriefing is to focus on the proposer's proposal (highlighting the strengths and weaknesses) and not those of other proposers.

Prior to any debriefing, the Attorney General's Office must be consulted as to content, form, and function of all debriefings. The PM and members of the PAT are to attend and conduct the debriefings. However, the PAT may, at its discretion, invite other members to attend the debriefings.

3.4.9 Filing a Protest

Protests must be filed in writing in accordance with the process and within the timelines specified in the ITP. The Department adjudicates protests in accordance with the process specified in the ITP, and its decision is communicated in writing.





Each proposer, by submitting a proposal:

- Is required to expressly recognize the limitation on its rights to protest, as noted in the ITP.
- Waives all other rights and remedies.
- Agrees that the decision of the Department is final and conclusive.

Section 3.5 Contract Administration Phase

Once the contract is executed, the Department transitions from the procurement process and begins to administer (e.g., provide oversight to ensure compliance with) the contract in partnership with the Design-Builder. The Design-Builder designs and constructs the project to its committed price and schedule. The general timeline of these events is depicted in <u>Appendix E</u>, starting at Notice to Proceed 1 (NTP1).

Success for projects using the DB delivery method includes:

- On-time and on-budget delivery
- Reduction of impacts to the traveling public due to construction
- Administration of the project with limited or no application of liquidated damages and charges.

To achieve success, integration of the Department and Design-Builder's team is critical. This integration is accomplished through ongoing partnering efforts throughout the organization of each entity. The benefits of creating an integrated team include the ability to make timely decisions and resolve issues at the appropriate levels in a cooperative and timely manner. Integration of the Department and Design-Builder can be required by the contract, incorporated formally as a best practice, integrated as part of standard operating procedures, or a combination thereof.

3.5.1 Contract Administration Phase Roles, Responsibilities, and Organization

The organizational chart (Figure 3-9) shows the reporting relationship, and the following sections detail the roles and responsibilities for those involved in the Contract Administration Phase.







Figure 3-9: Design-Build Contract Administration Phase Organizational Structure

3.5.1.1 Department Roles and Responsibilities

Department Project Manager

Reporting directly to the PPM, the Department PM is responsible for overseeing the Contract Administration Phase. The PM partners with the Design-Builder PM to manage project quality, risks, scope, budget, schedule, and change.

The Department PM's responsibilities include:

- Resolving cost, scope, and schedule issues directly with the Design-Builder's PM and support team members.
- Leading the review and payment for the Design-Builder and support team members' invoices.
- Referencing (and revising as needed) the internal Department PMP for managing the project's various internal and external activities.
- Coordinating and communicating with third-parties, local agencies, Department and support team resources, and the Department's Director/Senior Management.
- Coordinating with FHWA on federally funded projects or projects requiring FHWA involvement.
- Collaborating with the Construction Compliance Manager and District to expeditiously closeout the project in accordance with the contract documents and the standard Department closeout process for Substantial Completion, Project Completion, and Final Acceptance.





Design Compliance Manager

Reporting directly to the Department PM, the Design Compliance Manager is responsible for oversight of the Department's review of the Design-Builder's design submittals, working with the Design-Builder's Lead Engineer in resolving design comments related to the contract documents (notably the technical provisions).

The Design Compliance Manager's responsibilities include:

- Reviewing the Design-Builder's Quality Management Plans and verifying that the Design-Builder's approach to design is appropriately sequenced in support of both Design-Builder and Department resources.
- Leading the Department's design team in design reviews, which could involve commenting on the design documents, reconciling (in collaboration with the Lead Engineer) team comments, and actively participating in any comment review meetings and resolution of outstanding comments to progress the design forward.
- Supporting the review of and recommending progress payment approval for design costs submitted as part of the Design-Builder's invoices.

Construction Compliance Manager (Resident Engineer)

Collaborating directly with the Department PM on construction-related activities, the Construction Compliance Manager (Resident Engineer) is responsible for the Department's review of the Design-Builder's construction submittals and oversight and acceptance of the Design-Builder's construction work.

The Construction Compliance Manager's responsibilities include:

- Resolving cost, scope, and schedule issues directly with the Design-Builder's PM and support team members.
- Monitoring and documenting the Design-Builder's operations, including oversight and audit of the Design-Builder's construction activities to facilitate consistency with the contract documents.
- Overseeing acceptance of inspection, sampling and testing of project materials, and workmanship in accordance with the contract documents.
- Coordinate periodic independent assurance (IA) inspection, sampling, and testing to assure that the Design-Builder quality and Department acceptance procedures are performed in accordance with Design-Builder's PMP and the contract documents.
- Validating quantities and work performed to recommend progress payment approval of construction work submitted as part of the Design-Builder's invoices.
- Partnering with the Design-Builder to resolve issues.
- Supporting the PM in the negotiation and leading the preparation of change orders (e.g., preparation of independent cost estimates).
- Reviewing DBE compliance and workforce diversity participation and supporting requests from the Design-Builder to assist in methods that may improve compliance.





 Collaborating with the PM and District to expeditiously closeout the project in accordance with the contract documents and the standard Department closeout process for Substantial Completion, Project Completion, and Final Acceptance.

Contract Compliance Manager

Reporting directly to the Department PM, the Contract Compliance Manager is responsible to review certain submittals and overall project procedures considering the administrative requirements of the contract documents.

The Contract Compliance Manager's responsibilities include:

- Supporting the Department's review and approval and comment resolution with the Design-Builder of various NTP1 (project administration and mobilization) submittals and other submittals, as needed.
- Supporting the Department PM and Construction Compliance Manager by reviewing and/or preparing documents related to change management, including necessary coordination with the Design-Builder's PM.
- Ensuring the Department review comments are consistent with contract requirements and to help the Department and Design-Builder more efficiently and timely progress the project.
- Supporting the Department PM in issue resolution, including reviewing and tracking project schedule changes and impacts.
- Supporting the review of DBE compliance and workforce diversity participation and supporting requests from the Design-Builder to assist in methods that may improve compliance.
- Support the Department PM in preparing monthly reports, tracking progress, reviewing the Design-Builder's schedule, identifying necessary updates for the Department and Design-Builder PMPs, advising on contract document interpretation (e.g., issues related to ROW acquisition, hazardous materials, differing site conditions, and force majeure).
- Supporting the review and recommending progress payment approval of the Design-Builder's invoices.

3.5.1.2 Design-Builder Roles and Responsibilities

Design-Builder Project Manager

The Design-Builder PM is responsible for managing the successful and timely design and construction of the DB project.

Specific responsibilities of the Design-Builder's PM involve:

- Managing the overall interaction of design, construction, and quality within the Design-Builder's organization in a manner that facilitates compliance with contract documents.
- Coordinating with the Department PM to facilitate partnering in design, construction, and quality activities.





- Working with the Department to resolve issues.
- Overseeing submittal of payment requests to the Department and coordinating any necessary information requests regarding payment.
- Overseeing submittal of required reports and other documentation required by the contract documents.

Design-Builder Lead Engineer

The Design-Builder Lead Engineer leads the Design-Builder's design team and reports to the Design-Builder's PM.

The responsibilities of the Lead Engineer include:

- Managing design work performed by the Design-Builder's design team to ensure compliance with the contract documents.
- Ensuring design documentation and procedures are compliant with the contract documents and the Design-Builder's PMP.
- Coordinating with the Department's Design Compliance Manager in submission and resolution of comments for the design-related submittals.
- Authorizing notice of design changes and supporting review of field design changes.
- Leading the development and completion of Record Drawings.

Design-Builder Construction Manager

The Design-Builder Construction Manager oversees the construction QC organization, reporting to the Design-Builder's PM.

The responsibilities of the Design-Builder Construction Manager include:

- Managing construction work performed by the Design-Builder to ensure compliance with the contract documents.
- Ensuring the construction documentation and procedures are compliant with the contract documents and the Design-Builder's PMP.
- Coordinating with the Department's Construction Compliance Manager and the Contract Compliance Manager in submission of construction and contract-related deliverables.

3.5.2 Notice to Proceed 1 Activities

NTP1 is a period where both the Department and Design-Builder prepare the necessary management plans set up the project, mobilize resources/staff, and work together to build a team that transitions into the design and construction activities. The general scope of work and deliverables required to achieve Notice to Proceed 2 (NTP2) are described in the technical provisions and the contract.

During the NTP1 period, the team's focus on initial coordination, project set-up/mobilization, and partnering become the foundational elements to establish a framework for the Department and Design-Builder to effectively communicate, manage risk, anticipate and




avoid problems, and have an open forum to identify and solve project challenges. The following sections detail the various components of NTP1 in not only setting this foundation, but in defining the relationships that drive the rest of the project.

3.5.2.1 Communicating and Coordinating

A major goal of the NTP1 period is to establish communication and coordination protocols and processes to support the overall culture of collaboration. The following meetings and interface opportunities encourage working cooperatively to achieve the mutual goals and objectives of the project.

Kickoff Meeting

Shortly after award and issuance of NTP1, the Department and Design-Builder may conduct a jointly led kickoff meeting with the intent to initiate communication, collaboration, and relationships. Typical items for the kickoff meeting could include discussion of goals and establishing organizational structure and clear lines of authority within the Design-Builder and Department's organizations.

The Department PM may request this meeting through the Design-Builder PM, or vice versa. Attendees typically include the Department's project team and the Design-Builder's corporate management and project key personnel, including key subcontractors.

Partnering Meeting

The purpose of the any partnering relationship and related workshops is to establish and maintain effective communication between the Department and Design-Builder with the goals of cooperatively identifying and resolving critical project-related issues at the lowest responsible level.

Organized by the Design-Builder PM in collaboration with the Department PM, a partnering meeting brings the entire project team together to discuss various issues that typically include team building, decision-making time frames, issue escalation, and use the formal and informal dispute resolution process.

The Department's <u>*Guide to Partnering on NDOT Projects*</u> and the contract provide specific guidance on implementing partnering on a project.

Design Workshop

With the intent of defining and aligning the Department and the Design-Builder's approach to design development, both parties attend a design workshop. The Design-Builder's Lead Engineer typically leads this workshop, with the goals of the workshop being to:

- Establish clear lines of communication among the Design-Builder's design team and the Department's design leads led by the Department's Design Compliance Manager.
- Discuss the Design-Builder's approach to the design.





- Develop design submittal protocols, design review and comment procedures, and review schedule and milestones, including identification of critical path Department design reviews.
- Discuss potential design solutions not contemplated in the RFP or proposal and major or complex design features.
- Establish an understanding of how the Design-Builder plans to implement its PMP and how the Department completes its design reviews.

For the Department, participants typically include the PM, Design Compliance Manager, and appropriate design review team. For the Design-Builder, participants generally include the PM, the Lead Engineer, the Responsible Engineer by design unit, and other lead design staff.

3.5.2.2 Department Project Management Plan

The purpose of the Department's PMP during the Contract Administration Phase is to guide the internal team via various management workflows and processes, including procedures on change orders, issue management, communications, reporting structure, and submittal review procedures.

The <u>Project Management Guidelines</u> provides further details on how to prepare this update of the PMP.

3.5.2.3 Development of the Design-Builder's Project Management Plan

The role of the Design-Builder's PMP, as approved by the Department, is to serve as a collection of several management plans that describe the Design-Builder's management approach and quality procedures to design and build the project and satisfy the requirements of the contract documents. The Design-Builder organizes its PMP in accordance with requirements of the technical provisions, updating this PMP based on occurrence of certain events as described in the contract documents (e.g., changes to key personnel). Typical contents for the Design-Builder's PMP may include project-specific processes and procedures related to:

- Project Administration
 - Design Quality Management
- Quality Management
- Construction Quality Management
- Environmental Quality Management
- Safety
- Transportation Management

3.5.2.4 Mobilizing the Design-Builder for Notice to Proceed 1 Activities

One purpose of the NTP1 period is to mobilize certain Design-Builder and Department resources to maximize efficiency when initiating the project. The technical provisions list the possible NTP1 mobilization work such as:

- Utility potholing and/or adjustment coordination and design.
- Environmental permitting support and coordination.
- Sign inventory and site security.





- Work yard(s) and storage site establishment.
- Supplemental aerial mapping, supplemental ground survey, and survey control.

3.5.2.5 Developing a Project Baseline Schedule

The Design-Builder, in partnership with the Department, prepares a project baseline schedule for the purpose of planning and monitoring the work for a successful and timely completion of the project. Details for activities, logic, timing, loading, and structure are described in the technical provisions.

3.5.2.6 Completing the Disadvantaged Business Enterprise and Workforce Diversity Plans

The Department encourages DBE involvement and workforce diversity for all of its projects. The programs are designed to create a level playing field on which DBEs and employees can compete fairly for work on the project.

As such, the Design-Builder completes plans for DBE and workforce diversity participation that the Department uses to monitor the Design-Builder's progress toward the DBE and workforce diversity goals.

3.5.2.7 Setting Up an Electronic Document Management System

Clear organization and ease of access to project information are necessary features for an Electronic Document Management System (EDMS). Using one EDMS, the Design-Builder is to store, catalog, and be able to retrieve submittals, records, and data by providing a secure location for the Design-Builder and Department to upload, download, search, and access project information. The EDMS may allow for partitions that provide necessary confidentiality for both the Design-Builder and the Department. Further details related to the requirements of the EDMS are provided in the technical provisions.

3.5.2.8 Establishing a Dispute Review Team

The Department's goal is to cooperatively identify and resolve project-related issues at the lowest responsible level of management. However, if issues are overly complex and require escalation, additional tools for resolution are available. In these instances, the issue may need to be escalated through a sequence of procedures described in the contract, including:

- A structured issue resolution ladder.
- The Dispute Review Team (DRT) process.

The DRT's directive is to assist and facilitate timely and equitable resolution of disputes to avoid construction delay and litigation. The DRT is formed during NTP1 with both the Department and Design-Builder nominating a DRT member. A third member is mutually nominated by the team and agreed to by both parties. The DRT remains in effect as a standing board until it concludes all disputes up to project completion.

3.5.3 Notice to Proceed 2 Activities

Once the required deliverables and activities for NTP1 are completed, the team transitions into NTP2. The technical provisions and contract describe the general NTP1 scope of work





and related deliverables that need to be completed to move into NTP2. Achievement of NTP2, which is formalized by the NTP2 Authorization Letter, allows the Design-Builder to begin submittals related to design work. In addition, commencement of construction work for the project may also begin, subject to the Design-Builder meeting all requirements for the start of construction described in the contract.

3.5.3.1 Confirming Compliance

The Design-Builder and the Department each are motivated to ensure quality during implementation of the project. The Design-Builder has design responsibility, carries the primary risk of design details, and is required to construct the project in accordance with the contract documents. Further, the Department's role is to verify that the design and construction work is consistent with the requirements of the contract documents and that quality processes were followed.

The technical provisions further detail the Design-Builder's construction quality process.

3.5.3.2 Resolving and Managing Issues and Risk

The Department and Design-Builder attempt to proactively identify and resolve issues and risks at the lowest possible level and as quickly as possible. Timely and full resolution to issues and risks is critical to maintaining schedule, avoiding scope creep, and reducing potential for changes. The overall goals of issue/risk management are to:

- Proactively and fully communicate these items early in the process.
- Document the path to resolve/mitigate each item.
- Assign a clear and single point of responsibility for each issue/risk.
- Resolve each item as expeditiously as possible.

To achieve these goals, the Department uses a partnering approach and several "tools" to identify, track, and resolve project-related issues and risks. Building on the risk identification and allocation completed during the procurement process, risk/issue management (i.e., further identification, tracking/assigning, and mitigation) is crucial to reducing the frequency and potential severity of issues and risks. The Department actively manages these items in accordance with the Department's <u>*Risk Management and Risk-Based Cost Estimation Guidelines*</u>.

Additionally, the Department and the Design-Builder may use the issues management log, as provided in the technical provisions, to collaboratively determine issues for discussion during project and progress meetings. At these meetings, the Department and Design-Builder may identify new issues, discuss how to manage the issues, and confirm resolution and closure of an item. Parties from both the Design-Builder and Department may be assigned responsibility to manage an issue, and their actions to resolve the issue are to be documented. Any issues that cannot be resolved are to be escalated through a structured issue resolution ladder and may ultimately need to be resolved through DRT team input.

The Department PM and Design-Builder PM also are responsible for regularly reviewing and jointly updating the project's risk register, developed during the initial partnering





workshop. The purpose of this review is to identify any new risks and document and/or eliminate risks by adding or revising mitigation strategies until a risk is retired. Updates on current and projected risks and mitigation may be provided to the Department's Executive Management for reporting purposes.

3.5.3.3 Managing Change

Change may occur in the form of a deviation or change order. The following describes various tools and processes used for managing change.

Processing Deviations

The purpose of a deviation is to allow the Design-Builder an opportunity to request and document modifications to the contract documents that are beneficial to the project, but do not require cost or schedule changes. There may be many reasons a deviation is proposed, including:

- Modifications to the due date or content of a specific submittal.
- Allowing a Design-Builder to submit early packages to accelerate work.
- Adding or revising a project standard or Department process.
- Clarifying an ambiguous technical provision or contract requirement.
- Adding new software for use by the Design-Builder or the Department.

Deviations are subject to the Department's review and approval, where the Department considers the ramifications, benefits, and impacts to the project as part of its review.

Details regarding the submittal of deviations to the Department are provided in the technical provisions.

Issuing Department-Directed Changes and Processing Change Orders

While the Department and Design-Builder work together to manage risk and resolve issues early, change may still occur that could affect the project's schedule, budget, team performance, or commitments. As such, a process has been developed to deal with Department-initiated changes and how the Department administers both Department-requested and Design-Builder-requested change orders.

The objectives of the change management process are to:

- Identify potential changes.
- Assess the impact of changes.
- Develop an action plan to accommodate or avert changes.
- Effectively communicate aspects of a change to relevant stakeholders.
- Minimize cost impacts.

The Department has two mechanisms to initiate a potential change in the work: issuing a directive letter or change notice, both of which are initiated by the PM and are included in any subsequent change order. The directive letter is used when time is of the essence





to direct the Design-Builder to proceed immediately with the work to not impact schedule or work method. The Department may issue a change notice when time is not of the essence and the Department requires more information to evaluate if a change is needed. The contract further describes the use and content of a change notice and a directive letter.

For Design-Builder initiated change orders, a Request for Change Notice and subsequent Request for Change Order are submitted by the Design-Builder in accordance with the requirements in the contract.

In all instances, the Department and Design-Builder coordinate details regarding each request that may result in development of a change order to be processed by the Department and incorporated into the contract documents. The Design-Builder then executes the work in accordance with the change order, and the Department monitors the work for compliance.

Collaborating on Value Engineering Change Proposals

A Value Engineering Change Proposal (VECP) allows for the Design-Builder and Department to take advantage of potential cost savings or improvements to the work through changes to the contract requirements. The Design-Builder is encouraged to submit VECPs whenever it identifies potential savings or improvements for the project. The Department reviews each VECP and determines if it qualifies for consideration and evaluation. The Department is not obligated to evaluate a VECP and has sole discretion to approve a VECP. The Department may also request the Design-Builder develop and submit a specific VECP.

- Implementation of the VECP is initiated through a change order.
- The contract further details the content, submittal requirements, and Department review procedures for a VECP.

3.5.3.4 Monitoring Other Activities

Throughout the duration of NTP2, the Department monitors certain activities. The following highlights some of these activities.

Right-of-Way Acquisition Status

When Department-provided ROW is not fully acquired prior to award, the Department periodically provides an acquisition status update with access dates for each parcel in accordance with the technical provisions.

If the Design-Builder requires additional properties, Department ROW policies and procedures must be followed for appraisals, acquisitions, relocations, demolitions, construction/utility easements, scheduling, and reporting in accordance with the contract documents.

Third-Party/Utility Activities

For advance utility adjustments, the Department periodically updates adjustment status in accordance with the technical provisions.





If the Design-Builder impacts utilities, applicable requirements of the contract documents must be followed. The Department provides oversight to ensure utility adjustments are completed in accordance with the contract documents and any required utility agreements. The Department coordinates with the Design-Builder to confirm adequate coordination with third parties and utilities.

Maintenance of Traffic Limitations

As part of construction activities, the Construction Compliance Manager and Contract Compliance Manager verify that the Design-Builder's MOT plans and actual construction closures/temporary traffic modifications meet contract document requirements, including confirmation that the Design-Builder does not exceed the permitted construction closure regime listed in the technical provisions.

Subcontractor Review and Approvals

The Design-Builder may utilize the services of any subcontractor listed in its final proposal. For additional subcontractors, subconsultants, or suppliers, the contract defines the process for the Design-Builder to request subcontractor additions and substitution.

The Department evaluates each request for a new subcontractor and approves in accordance with the contract.

Disadvantaged Business Enterprise Goals and Attainment

On projects that have a DBE goal and/or a workforce diversity goal, the Contract Compliance Manager and Department Civil Rights Division monitor compliance with the contract requirements and the approved DBE Performance Plan and Workforce Diversity Performance Plan, respectively.

3.5.3.5 Overseeing Payment and Progress

Tracking Submittal and Design Progression and Measuring Quantities

The Design-Builder's preparation of submittals (that clearly meet the contract requirements) and the Department's timely review and response to each submittal are two of the most important aspects of a successful DB project. The contract documents establish the framework, processes, and requirements related to submittal review durations. However, delivering the products is ultimately the responsibility of the team.

The measurement and payment procedures detailed in the Department's Standard Specifications are not applicable under DB delivery because of the lump sum, fixed-price structure of the contract. To address payment, the proposal may include a payment schedule, maximum payment curve, or other method as directed in the contract documents. The payment mechanism described in the contract guides how payment is made to the Design-Builder. The Department PM and the Compliance Managers are responsible for monitoring, updating, and documenting work progress when reviewing and approving requests for payment (i.e., invoices and progress reports). This includes tracking submittals and design progression and measuring quantities for construction work to verify progress and payment.





Progress Reporting

The intent of the progress report is to provide documented support for each month's invoice. Beginning the first month after NTP1, the Design-Builder submits its progress report to the Department on a recurring basis for review and comment. Each progress report typically includes, at a minimum, a project status schedule, schedule narrative, issues management log, change order tracking log, and summary of activities on the project.

The Department also reports monthly to their executive management on the status of each project.

The technical provisions further detail the content and submittal requirements for each progress report.

Schedule Status Updates and Revisions

The purpose of the project status schedule and its associated narrative are to provide both the Department and Design-Builder a recurring periodic review for completed, ongoing, and future activities.

The design and construction processes are often dynamic and can result in schedule changes over the duration of a project. A schedule revision and approval process allow for revisions to be made to the project schedule so that the schedule can accurately reflect how the Design-Builder completed its "as-built" work and plans to perform the remaining work.

3.5.3.6 Achieving Substantial Completion

The process to achieve substantial completion requires coordination between the Department and Design-Builder to confirm all conditions for substantial completion have been satisfied. One of the primary requirements is that all lanes of traffic (including lanes, ramps, interchanges, overpasses, underpasses, and other crossings and intersections) are in their final configuration and available for public use.

The Design-Builder is responsible for the following to achieve substantial completion:

- Coordinate and exchange information with the Department regarding necessary details to achieve substantial completion.
- Submit a notification of substantial completion when Design-Builder believes they have addressed all conditions required to achieve substantial completion. This notification includes a request to be relieved of maintenance liability for those elements of the project, which at substantial completion, are placed into full operation and service.

In coordination with the Construction Compliance Manager, the Department PM verifies that the Design-Builder's work is acceptable, and that related documentation required by the contract documents is complete. If outstanding issues have been addressed, the Department issues the Certification of Substantial Completion, accepting or rejecting the request to partially relieve maintenance in coordination with District representatives.





Additional requirements and details related to substantial completion are provided in the contract.

3.5.4 Project Closeout

As summarized on Figure 3-10, the project closeout process consists of two major milestones: project completion and final acceptance.



Figure 3-10: Design-Build Project Closeout Process

3.5.4.1 Achieving Project Completion

Upon achieving substantial completion, the Department and Design-Builder begin working together to complete the steps necessary to achieve project completion. During this time, the Design-Builder completes its remaining work (if any) to ensure its obligations under the Contract documents are satisfied, with the exception of any warranty work. This effort includes that:

- The project has been completed.
- Equipment, materials, facilities, improvements, structures, and components have been properly constructed and tested.
- Deliverables have been provided to the Department or others (as applicable).

As part of this activity, the Department PM and Construction Compliance Manager verify that the closeout documentation is acceptable, confirm that the necessary bonds remain in place through project closeout, and for any outstanding work, develop a written list of items to be completed or corrected (i.e., the "punch list"). The Design-Builder completes the punch list prior to the Design-Builder submitting and the Department approving the Certificate of Project Completion.

Additional requirements and details related to project completion are provided in the contract.





3.5.4.2 Warranty Period and Department Compliance Checks

The general and specific warranty periods commence once project completion is issued. In parallel with the warranty period(s), the Department completes its internal compliance checks and final payroll review. The Department also completes its final inspection for District acceptance as it relates to site stabilization and potentially plant establishment.

The contract details warranty obligations, timing, and remedies.

3.5.4.3 Invoicing and Approving Final Payment

Once the warranty period has elapsed and the Department has completed its compliance and acceptance checks, the Design-Builder can submit its application for final payment. This application includes an affidavit stating it believes it has achieved final acceptance and appropriate subcontractor and surety release documentation to close out the project.

The Department reviews the application for final payment as part of its checklist for final payment. If rejected, the Design-Builder must resubmit the application for final payment. If approved, the Department issues an acceptance letter, and the Department and Design-Builder transition into final acceptance.

The contract details the final payment application and Department review/approval process.

3.5.4.4 Achieving Final Acceptance

The purpose of final acceptance is to allow the Department time to complete its due diligence to verify that project closeout is satisfactorily completed and that appropriate notification has been sent to subcontractors, creditors, and others with an interest in the project.

In accordance with NRS 408.363 and 408.387, a 30-day subcontractor and creditor notification period commence upon the Department Director's notice of final acceptance.

Once the notification period closes, the Department issues final payment and notification of final acceptance, which includes the release of retainage, final payment for any outstanding items, and any deductions as allowed by the contract.

The Department closes the project once final payment is made, internal documentation completed, and project files are compiled and delivered to Central Records.





CHAPTER 4 PUBLIC-PRIVATE PARTNERSHIPS





Chapter 4 Public-Private Partnerships

Section 4.1 Overview of Delivery Process

Public-Private Partnerships (P3) is an alternative contracting method where the Nevada Department of Transportation (NDOT or the Department) enters into a single contract with a private-sector developer (P3 Developer), which may include any combination of design, construction, operations, maintenance, and finance responsibilities for a transportation facility. A P3 Developer also is known as a concessionaire and typically has greater responsibility for the development, Operations & Maintenance (O&M), and financing of a project compared to the private sector's role for other non-P3 delivery methods.

This Chapter describes the process the Department follows when a P3 Developer designs, constructs, operates, maintains, and finances a project in return for an availability payment that would typically occur over a 20-plus year period. An availability payment P3 project compensates the P3 Developer through periodic payments based on the P3 Developer's performance and availability of the P3 project to the travelling public. The Department may tailor the processes described in this Chapter to accommodate the unique characteristics of each project.

The guidance on the approach for P3 project delivery is intended to supplement the Design-Build (DB) delivery method detailed in <u>Chapter 3</u>, which provides a baseline for the P3 processes and tools necessary to deliver many elements of a P3 project. However, certain characteristics of P3 project delivery, including O&M and financing, are unique and are solely addressed in this Chapter.

A P3/DB sidebar tool is included to show the key differences between the two delivery methods.

The Department is only permitted to procure a P3 delivery if the location of the project is in a county whose population is 700,000 or currently Clark County, unless the project is initially received as an Unsolicited Proposal (UP).

<u>Section 1.2.4</u> provides additional information about the Department's legislative authority for P3 project delivery and the initial steps involved in identifying the project delivery method.

4.1.1 Project Delivery Workflow

The typical P3 process follows the workflow illustrated on Figure 4-1. <u>Appendix G</u> provides more detailed graphic examples of the activities, milestones, and decision points involved in the process.







Figure 4-1: Public-Private Partnerships Project Delivery Process

P3 projects follow the <u>Section 3.1.1</u> project delivery process, except as follows:

- Identification Phase is when the Department uses the established Project Delivery Selection Approach (PDSA) as described in <u>Section 1.4.2</u> to identify the optimal delivery method for a project. This process is supplemented by the P3 Feasibility Process, which includes a Value for Money (VfM) analysis to complete the Identification Phase.
- <u>Solicitation Phase</u> is the first phase in the procurement process. P3 delivery includes involvement of technical, financial, and legal advisors familiar with this delivery method. Financial qualifications and experience in performance of O&M of potential P3 Developers is evaluated during shortlisting.
- Evaluation Phase is the second phase in the procurement process that evaluates the proposals submitted in response to the RFP with the addition of O&M and financial aspects of the proposals. Proposal reviewers evaluate the financial aspects of a proposal for the financial strength and viability of the proposer and the proposal.
- Award Phase is the final phase in the procurement process that involves contract negotiations, conformance, award, and includes a financial close stage after contract execution. The financial model of the best-value proposer is placed into escrow to ensure the model is not modified by either party until it is updated at financial close, refinancing(s), compensation events, and relief events as described in the contract.
 - <u>Financial Close</u> for a P3 project typically occurs approximately three to six months after commercial close and involves the updating of interest rates to reflect the actual rates and calculations of adjustments for any compensation arrangements described in the contract. The Department, with the assistance of financial advisors, may be involved with Transportation Infrastructure Finance and Innovation Act (TIFIA) or Private Activity Bonds (PABs) financing used to finance the project.
- Contract Administration Phase starts with the Design & Construction (D&C) Stage and continues through the O&M Stage of the project. During this phase, the Department performs administrative functions and monitors project performance to ensure that the work performed by the P3 Developer is in conformance with the requirements of the contract documents.
 - <u>Design & Construction Stage</u> includes the design and construction activities similar to the DB process. Additionally, this stage includes O&M during construction to allow the P3 Developer to manage assigned risks for the life cycle of designated infrastructure.





- <u>Operations & Maintenance Stage</u> begins at substantial completion and continues through the termination of the contract.
- <u>Handback Stage</u> involves tasks the P3 Developer must complete in coordination with the Department to return the project to the control of the Department in the established conditions described in the contract. The Handback Stage occurs near the end of the O&M Stage and is concurrent with other responsibilities of the O&M Stage.

Section 4.2 Public-Private Partnership Identification Phase: Evaluating P3 Feasibility

Projects under consideration for the P3 delivery method will only move to the Solicitation Phase after it is determined that the project is a viable P3 candidate compared to other non-P3 delivery options during the Identification Phase. The P3 feasibility process described in this section is a subset of the Identification Phase (Figure 4-2) and relies on a VfM analysis to assess and compare delivery methods.



Figure 4-2: Public-Private Partnerships Project Delivery Process – Identification Phase

4.2.1 Public-Private Partnership Identification Phase Roles, Responsibilities, and Organization

P3 projects follow <u>Section 1.4</u> project identification requirements for organization, personnel, and roles and responsibilities but also requires key Department personnel and external Service Providers specializing in financial, insurance, and O&M who are necessary to complete the P3 feasibility process. Figure 4-3 illustrates this organizational structure.

Project Delivery Selection Committee

The Project Delivery Selection Committee (PDSC), with the support for the Department's P3 advisory team and Service Providers, evaluates the



Figure 4-3: Public-Private Partnerships Identification Phase Organizational Structure





qualitative and quantitative merits of the P3 feasibility in comparison to other appropriate delivery methods.

Department Public-Private Partnership Advisory Team

The Department P3 Advisory Team will be comprised of the subject matter, technical, and administrative experts within the Department to provide input in to the P3 feasibility process. Key personnel would include the Chief of Financial Management and key staff from the affected District, technical disciplines, and functional groups. This support team would be called upon as needed, could vary in size depending on the type and level of resources required, and would typically be comprised of design, materials, construction, operations, maintenance, financial, and asset management staff among others

Service Providers

Financial Advisor

The P3 Developer's responsibilities typically include providing the financing for a project. As a result, the Department likely will need financial advisors who can evaluate the reasonableness of the plan of finance in addition to the financial strength of a proposer and any guarantors. To perform their evaluation, the Financial Advisor will need to develop and update the financial model used for the VfM analysis.

The Department may also need the assistance of municipal Financial Advisors for the issuance of PABs for the project.

Insurance Advisor

Insurance Advisors typically are needed to develop the insurance requirements to be included in the Request for Proposal (RFP). The insurance market is always evolving in terms of coverages, deductibles, and costs. Therefore, an advisor that is independent of selling any insurance products is essential in the development of the insurance requirements for a P3-delivered project.

Operations & Maintenance Advisor

In addition to the internal O&M resources of the Department, an O&M Advisor would help with the development of performance-based technical requirements, O&M, and life cycle/handback cost estimates from a P3 Developer perspective. This work is essential for effectively transferring and quantifying the cost of O&M and handback compared to the traditional Design-Bid-Build (DBB) cost approach.

4.2.1.1 Public-Private Partnership Feasibility Process

In general, if the DB delivery option appears to be viable for a project going through the PDSA screening process, the Department may consider P3 delivery as an option for projects in Clark County.

If the PDSC determines that the project may be appropriate for P3 delivery, the PDSC will make a recommendation to the Pioneer Program Manager (PPM) to further evaluate this option. Approval by the PPM and Pioneer Program Director (PPD) will be required to proceed with the P3 feasibility process. If approved by the PPD, the Department will evaluate the project using VfM analysis to compare P3 delivery to the most appropriate alternative non-P3 delivery approach.





Figure 4-4 provides a graphical representation of the P3 feasibility process, which is important in determining whether a candidate project is appropriate for P3 delivery as a part of the identification phase process (Figure 1-3).



Figure 4-4: Public-Private Partnerships Feasibility Process

Value for Money Analysis

VfM is the tool to identify the appropriate delivery method. A P3 project delivery approach may provide value for money compared to other non-P3 delivery methods if the advantages of risk transfer, private-sector incentives, experience, innovation, and efficiencies over the project life cycle outweigh the increased costs of contracting and financing, and meet the Department's and the traveling public's requirements.

The information gathered through the VfM analysis process assists internal and external stakeholders in understanding why P3 delivery brings value to the Department and the State.

Rather than making decisions on a delivery method based on up-front project delivery costs, quantitative VfM analysis generates a value that reflects the transfer of risks to the party best able to manage the risk, lowering the overall project life cycle cost.

During the Identification Phase, the VfM utilizes the best information available to complete the analysis. This information may initially be high-level and if so would be updated to give the Department the ability to better assess the qualitative measures, the allocation of risk, and project cost prior to the issuance of the Request for Qualifications (RFQ).

The Department uses VfM analysis to compare P3 delivery to the most appropriate non-P3 alternative delivery option as determined by the Department for the same project. The comparison is intended to be an "apples to apples" comparison.

It is recommended that experienced financial modelers (advisors) perform the VfM analysis, using a financial model that includes capital, O&M, and financing costs, to





properly evaluate the cash flows and net present value associated with each delivery option.

If the VfM analysis produces results that are favorable to P3 delivery, the Department refines the results as more due diligence is performed during the development of the project.

The VfM analysis also guides the ultimate project scope definition and optimal structure (Design-Build-Finance [DBF], Design-Build-Finance-Operate-Maintain [DBFOM], etc.) of a potential P3 project. The optimal structure of the P3 project typically is based on the project goals, capabilities of the Department, and the quality and capabilities of potential P3 Developers. Obtaining industry feedback is an important step in confirming or refining the structure to increase interest and competition.

During the Solicitation Phase, the VfM typically helps to support a business case that describes the potential financial feasibility of the project if delivered via P3. The business case represents the Department's view on financial viability of the project.

A well-prepared business case:

- Enables the organization and its key stakeholders to understand, influence, and shape the project's scope and direction early in the planning process.
- Assists decision makers with understanding the key issues and project information that would avoid committing resources to delivery approaches that should not proceed.
- Demonstrates to senior management, stakeholders, customers, and decisionmakers the continuing viability of the project.
- Provides the basis for management, monitoring, and evaluation during and after implementation.

The business case must reflect that P3 project delivery is financially feasible prior to issuance of the RFQ. As the procurement process advances and more due diligence is performed, the business case continues to be refined and evolves into a revised shadow bid and public-sector comparator that would be used as a reference point in the procurement process. The Department uses this reference point to make informed decisions and adjustments to successfully procure the project.

The final version of the VfM incorporates a shadow bid that takes into consideration the contract requirements included in the final version of the RFP and a public-sector comparator using the Department's most appropriate non-P3 alternative delivery approach.

Scoping and Definition

The project scope and definition are initiated during the planning and project scoping process and could include P3 elements such as financing options, limits of O&M, and allocation of responsibilities for O&M. The Department may revisit the scope during





identification and throughout the procurement process to optimize value as determined by updates to the VfM analysis.

Qualitative Value for Money Analysis

Qualitative VfM analysis typically involves checking the rationale for using P3 delivery, including whether a project is suitable for private financing and/or operation and maintenance risk transfer.

The Department may conduct a high level qualitative VfM analysis to evaluate whether the project displays characteristics that are conducive to P3 delivery. This analysis involves: 1) evaluating the project based on the considerations described below, and 2) further evaluating the criteria outlined in <u>Appendix H</u>.

- Is the project a high priority, but there are limited funding and financing options for the Department or the State to fund or finance the project?
- Are there certain risks typically managed by the Department that may be allocated to a P3 Developer and may result in D&C or O&M savings based on project-specific conditions?
- Can a P3 Developer more effectively manage the D&C and/or O&M risks when the project scope has unique elements that are outside of the Department's area of expertise?
- Is the project significantly complex to the extent that a P3 Developer may be able to develop innovative solutions and/or identify efficiencies that provide cost savings during the D&C and/or O&M period?
- Could life cycle costs be significantly lowered by transferring DB, O&M, and financing responsibilities to a P3 Developer?
- What is the likely reaction by local stakeholders to P3 delivery after they have been educated about this alternative delivery method?

If the results of the qualitative analysis indicate a P3 delivery is likely to have a high potential for success, the PDSC would typically recommend advancing to the quantitative analysis step.

Quantitative Value for Money Analysis

Quantitative analysis is based on information collected to support the PDSA process and consideration of responses to the criteria for P3 delivery included in <u>Appendix H</u>. The analysis includes developing risk adjusted cost estimates for design, construction, operations, routine and life cycle maintenance, and finance for input into the financial model for delivery model comparison purposes. A financial model is a tool that is used to forecast the project's financial performance assuming a specific delivery method. The forecast typically is based on assumptions about cash flows for the completion of D&C, O&M, and payment of financing costs and profit over the term of the contract.

The quantitative analysis will generate benchmarks used to compare a public sector comparator with a P3 delivery approach called a shadow bid. The public sector





comparator and shadow bid will be compared to the best value proposal if a procurement is undertaken. These concepts are described in greater detail below.

NDOT's Role in the Quantitative Value for Money Analysis NDOT typically will be responsible for providing the inputs (Table 4-1) for the project into the VfM analysis. The Department's financial, legal, and O&M staff will work closely with the Service Providers to: 1) evaluate the qualitative criteria; 2) collect, format, and apply the information needed for the financial model; and 3) evaluate and validate the results.

Table 4-1: Public-Private Partnerships Quantitative Value for Money Inputs

Financial Inputs

Any information available to evaluate ridership and revenue estimates provided by the P3 Developer if a

transit project is in Clark County. Credit Rating Interest Rate Assumptions NDOT's beginning cash balance for the current period Three-year historic average, current and projected cash inflows into NDOT from: Gas tax Special fuel estimates Other state revenue estimates Government services tax Federal aid (net of anticipated federal reversions) Miscellaneous revenues Three-year historic average, current and projected expenditures from: NDOT's capital program (excluding bond proceeds and expenditures) Other expenses Department of Motor Vehicles (DMV) and Department of Public Safety (DPS) expenditures Other appropriations • Bond sinking fund (i.e., set aside for debt service) Other obligations Planned debt service schedule of payments Interest rate assumptions **Technical Inputs** Construction Costs: All construction-related costs for the work necessary to construct or reconstruct the • project. Engineering Costs: All engineering and engineering-related costs necessary to plan, permit, design, and construct the project. O&M Costs: All costs associated with maintaining the replaced structures and related items within the project limits to the standards defined in the contract for the period specified. Estimated project duration and milestones including design, substantial completion, final acceptance, O&M Stage, and termination of the contract for the analysis period. Anticipated cash flows as a percentage of the total D&C cost over the D&C period and annual expenditures over the O&M period including handback.

Risk Assessment

The PMT will identify and assess the likelihood and impacts of project-related risks (including life cycle, O&M, and financing). Once risks have been quantified and allocated, their estimated value is used in the financial assessment so that procurement models can be compared on a risk-adjusted basis.



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Public-Sector Comparator

The public-sector comparator represents the total life cycle project risk adjusted cost developed during the quantitative analysis using the most likely and efficient form of non-P3 delivery (most appropriate as determined by the Department). The Department develops a formal public-sector comparator estimate to establish a baseline for this delivery method. The estimate for the public-sector comparator contemplates competitive neutrality and removes any competitive advantages and disadvantages that accrue to a public-sector agency by virtue of its public ownership, such as freedom from taxes.

As the project advances through the procurement process, the public-sector comparator may change or need refinements to address modifications to the scope or material changes to commercial or contractual terms of the draft P3 Contract included with the RFP.

Shadow Bid

To fully assess the benefits of a P3 delivery method, the Department develops a formal shadow bid estimate to facilitate comparison with the more traditional methods established in the public-sector comparator. The shadow bid is the estimated value of the P3 delivery approach using a P3 Developer's perspective as it relates to costs, risks, and financing structure. The shadow bid includes the risk-adjusted life cycle cost of the P3 alternative, based on the Department's established project scope. This scope should be consistent with the public-sector comparator scope, as well as the major commercial terms, which reflect retained/transferred risk. A shadow bid model facilitates development of the likely competitive range of the availability payments for budgeting purposes.

Financial Assessment

The financial assessment uses the financial model that supports the VfM analysis to make comparisons between P3 and the Department's most appropriate non-P3 alternative delivery method that will be used as the public-sector comparator. If P3 delivery is identified as the preferred delivery method, the Department will update the financial model to produce an updated shadow bid to support a business case for P3 delivery prior to the issuance of an RFQ. As the Department refines the procurement during the Solicitation Phase, the financial model may be updated, and further quantitative analysis/financial assessment performed to create a shadow bid and public-sector comparator as reference points during the procurement process.

Value for Money Comparison

The public-sector comparator may be used as a benchmark against the shadow bid to quantitatively measure the expected value of P3 delivery. P3 delivery should cost less than the public-sector comparator to be preferable to the most appropriate non-P3 alternative delivery approach. However, qualitative VfM factors are not fully accounted in the financial models and should be considered in conjunction with the quantitative results as part of a fully informed evaluation process. Examples of these factors include the urgency of delivery, regional economic benefits, or unique innovative or financial circumstances influencing the business case.





When the Department receives P3 proposals (including UPs as depicted in Figure 4-5) a comparison of the P3 proposal to the public-sector comparator, as well as the shadow bid, may be used to help support the decision-making process. However, due to the potential subjectivity and differences in the models, the Department will typically rely upon selection criteria for the selection and award the project.



Figure 4-5: Quantitative Value for Money Comparison during Public-Private Partnership Identification

Value for Money Cost Components

- The base cost estimate includes administrative, procurement, engineering, right-of-way (ROW), utilities, capital, O&M, third-party, and other costs directly attributable to the scope of the project. These costs are typically "raw costs" since risks and uncertainties are quantified and applied to the public-sector comparator and shadow bid separately. Allowances and contingencies should not be incorporated in the base cost.
- Risks retained by the Department are those that are not transferred to the P3 Developer. The estimated value of these risks (allocated to the Department) is another cost component for each of the options (public-sector comparator, shadow bid, and P3 proposal).
- Financing costs are costs associated with arranging financing for a project. This means with debt and equity for a P3 option, and typically with bonds for a non-P3 option. It may include arrangement fees, commitment fees, and credit premiums.





- Competitive neutrality cost estimates are applied to the public-sector comparator and shadow bid to allow comparison on an equivalent basis by neutralizing any competitive advantages or disadvantages that the public agency may have. Examples include:
- Differences in taxation (land or property taxes, local government rates, exemptions, payroll taxes, corporate taxes) leading to higher costs for the P3 Developer, which eventually translate into higher costs for the Department.
- Increased administrative requirements, reporting requirements, or material requirements/legislation/regulation (e.g., building permits).
 - The P3 proposal (or UP as the case may be) cost components used for VfM comparison include the value of payments offered by the P3 Developer (which includes the financing costs and any contractual risk allocated to the P3 Developer) and the contractual risk retained by the Department for this option.

In most cases, analyzing VfM for an UP involves comparing the expected costs of the UP against both the public-sector comparator and the shadow bid in addition to evaluating the qualitative implications of implementing the proposed P3 project. Without the benefit of a competitive procurement, the evaluation of the UP requires additional scrutiny and a defined screening and quantitative evaluation process as described in <u>Section 5.2.3</u>.

Under a competitive procurement, the P3 procurement strategy, the level of project development, and the industry review process should improve the Department's confidence in the success of P3 delivery. This should allow for the Department to rely primarily on the shadow bid as a budget threshold, one-on-one meetings during the procurement process, and on proposal evaluation criteria to drive the selection process.

If the results of the process indicate that P3 delivery may provide a good value to the Department, the PDSC to the PPD will make a recommendation, and the Identification Phase will proceed as described in <u>Section 1.4</u> towards a recommendation to the Nevada Transportation Board (Board).

If the analysis does not produce a result that favors P3 delivery, the PDSC will proceed with recommendations for other methods of project delivery.

Section 4.3 Procurement Process: Solicitation Phase

During the P3 Solicitation Phase (Figure 4-6), the Department develops project-specific procurement and contract documents with a basic configuration that describes the minimum requirements in terms of number of lanes and connectivity with a heavy focus on the use of long-term performance requirements to transfer the risk of the success of the project to the P3 Developer.







Figure 4-6: Public-Private Partnerships Project Delivery Process – Solicitation Phase

4.3.1 Solicitation Phase Roles, Responsibilities, and Organization

P3 projects will follow <u>Section 3.2.1</u> requirements for organization, personnel, and roles and responsibilities with the addition of external Service Providers specializing in financial, insurance, and O&M that are familiar with P3 procurement, the personnel qualifications, and performance requirements as described in <u>Section 4.2.1</u>.

4.3.2 P3 Project Development

Typically, the basic configuration developed for a P3 project limits the amount of detail in comparison to the DB delivery description described in <u>Section 3.2.2</u> to increase the flexibility that P3 Developers may use to prepare innovative solutions.

4.3.2.1 Preparing a Project Management Plan

The PM develops the Project Management Plan (PMP) to address the P3 specific personnel, activities, and budget needed to complete the procurement.

4.3.2.2 Developing the Appropriate Level of Preliminary Engineering

The reference design and resulting basic configuration for the P3 delivered project may be more streamlined to allow flexibility and innovation to drive value for the Department. The Department will refine the design, construction, and O&M costs, along with the VfM analysis to develop a business case, public-sector comparator, and shadow bid to support the procurement process.

4.3.2.3 Creating and Updating a Project Schedule

In addition to project schedule elements covered in DB projects, the P3 project schedule will also include financing, O&M, and handback activities. Dates for milestone payments are of primary importance to a P3 Developer because payments from the Department are not provided in the same way as they are for traditional or DB projects. Milestone payments, if included, are not paid until certain conditions described in the contract documents are achieved and availability payments typically do not begin until achievement of substantial completion. Therefore, P3 Developers are highly incentivized to meet these schedule milestones.





Project Development Preparing a PMP Preliminary Engineering Project Schedule Project Cost O&M Cost and Long-Term Modeling/Forecasting Risk Analysis Handback Financing Updated Value for Money Programming Stipend

Design-Build & P3 P3-Specific

4.3.2.4 Establishing and Updating Project Cost

Cost estimates are necessary for P3 projects to support a strong business case for the financial feasibility of a project, to help the Department estimate the public subsidy required, and to build interest from the private sector for the project, improving competition and value for the Department. The Department should conduct due diligence of potential project-specific revenue streams to understand their benefit to the project. For example, in Clark County, transit fees may be a source of funding to support project financing to reduce the subsidy required.

The estimates will address O&M, handback, and financing, in addition to the D&C, and will be used as inputs into the VfM analysis.

4.3.2.5 O&M Cost and Long-Term Cost Modeling / Forecasting

O&M cost estimates are essential for determining P3 project costs and are developed through a model that is customized to the project. To prepare an estimate for O&M costs, the Department will evaluate project-specific conditions to determine the appropriate transfer of maintenance responsibilities for each project element with a goal to optimize value for the Department. Some project elements (e.g., existing structures) may remain as part of the Department's maintenance responsibility based on risk or cost considerations. Additionally, the Department will assess operational elements to determine who can more effectively and efficiently manage these activities.

Following allocation of O&M responsibilities for each element on the project, the Department will develop annual costs for life cycle/major maintenance, reactive, and routine O&M costs with consideration of project-specific conditions, including type of material (e.g., concrete, asphalt, etc.), age of infrastructure, and existing O&M agreements. Additionally, O&M costs will reflect the necessary work associated with the anticipated performance standards during the O&M period to be included in the contract. For each element, The Department will provide performance standards along with the performance target, inspection and measurement method, minimum duration to identify O&M issues, and minimum duration to remedy any defects.

Depending on project-specific characteristics, the overall O&M costs can exceed the initial construction cost over the term of the contract. Therefore, this estimate may have a significant impact on the results of the business case. The public-sector comparator and shadow bid should consider the overall O&M needs and account for necessary O&M in each of these models.

4.3.2.6 Conducting a Project-Specific Risk Analysis – Managed by Project Management Team

O&M uncertainties for P3 projects result in cost and schedule risks that have long-term implications affecting life cycle considerations and overall costs throughout the project's life expectancy. As with capital costs, the risk-based O&M cost estimates will account for escalation and uncertainties based on historic and market expectations.

O&M risks are dependent on the type and condition of infrastructure in place, the design approach, construction methods, and maintenance strategy for the major elements of the project. Additionally, O&M risks are influenced by the performance measures/standards





established in the contract, methods to ensure compliance established in the contract, and availability of Department resources to hold the P3 Developer accountable for meeting established performance requirements.

When developing costs, the Department must consider the risk of potential modifications of the maintenance standards over the duration of the contract and the contract should clearly address risk allocation.

The financial model is built using a risk analysis framework, allowing the full range of potential project costs to be considered in the financial analysis. Key interest rate, debt service, and other financial risks may be identified, quantified, and incorporated in the financial model. The financial model can then be run iteratively to produce probable financial outcomes.

4.3.2.7 Handback

Handback is the process for transitioning the project facilities from the operation of the P3 Developer to the Department. The goal of the handback process is for the Department to receive these P3 project facilities in good or better condition as compared to an asset of similar nature and age and the Department should not be required to make capital expenditures on repairs or upgrades shortly after the end of the O&M Stage. The contract details the handback process and requirements, which involve the activities and tasks shown in Table 4-2.

Activity or Task	Description
Minimum Residual Life and Useful Life Requirements	Minimum criteria for either Residual Life or Useful Life outlined in the contract that must be met for each element or asset that is part of the project.
Inspection/Audit Requirements	A minimum number of inspections are required, on or by date(s) that are specified in the contract. Often, these are required to be joint inspections between the Department and the P3 Developer, as well as a third party to help resolve disagreements as the handback process moves forward.
O&M Training Session	The P3 Developer is required to provide Department employees with training on the O&M of the facility. The training must be completed by some previously defined time prior to the end of the contract term. In addition to this training, the P3 Developer must make personnel available for consultation on O&M and repair work for some period after the project term expires.
Handback Reserve Account	The P3 Developer is required to establish and fund a handback reserve account. This reserve account is required as security for the obligation of the P3 Developer to transfer the project back in the agreed condition, with each element meeting the relevant residual life requirement. The handback reserve account should remain funded with the handback reserve amount, which generally equals the amount necessary to ensure the project meets the handback requirements at the end of the term. Deposits into this account are typically required to be made quarterly.
Spare Parts and Tools	The P3 Developer is required to provide the Department with all spare parts and tools that have already been paid for by the Department and are necessary for operations and maintenance of the facility.
Residual Life Calculation Methods	The P3 Developer is required to propose methods for calculating residual life based on the technical provisions. This helps to avoid the use of outdated standards and practices.
Final Handback Acceptance	A certification that releases the concessionaire from the contract and final payment, if applicable.

Table 4-2: Public-Private Partnerships Contract: Handback Activities and Tasks





4.3.2.8 Financing

A significant portion of the cost of a P3 delivered project is the financing cost. Due to competitive tension, the private sector will look to keep financing costs as low as possible in their proposal to improve their chances of winning. PAB and TIFIA financing are two options often included in the plan of finance for P3 project proposals.

A PAB is a tax-exempt municipal debt that is loaned to a P3 Developer for the delivery of public infrastructure. By federal regulation, the public sector issues PABs, with the bond proceeds going directly to the P3 Developer for the delivery of the P3 project. The Department would need to secure an allocation of PABs from the United States Department of Transportation (USDOT) and make this PAB allocation available to all proposers for purposes of use in their P3 proposal. The Department would not be liable to bond holders for the debt and neither the Department's nor the State's credit will be negatively impacted by the failure of the P3 Developer to repay the debt. A special or state entity typically issues PABs, to further clarify to bond holders that the Department or State has no recourse. In Nevada, the Nevada Department of Business and Industry is the state entity to issue the PABs.

TIFIA financing has been critical in the financing and delivery of most of the projects completed to-date. The reason the USDOT loan program has been so important is that TIFIA is a low-cost, patient lender allowing projects to be built and operational before the commencement of repayment. This allows the P3 Developer to allow projects to become more financially stable before commencing repayment on the TIFIA debt.

Lenders always require the P3 Developer to put some equity into the project so that they have exposure to the success and failure of the project. Equity is funding that comes from the companies that comprise the P3 Developer. Equity is the first money that is lost if the project underperforms financially. Due to this risk, the expected returns on this money are higher than debt that has a lower risk profile. Proposers want to achieve the lowest financing and equity costs (i.e., lowest cost of capital) by maximizing the amount of debt and minimizing the equity that they must provide to finance the project.

4.3.2.9 Updated Value for Money Analysis

The Department refines the results of the VfM analysis during the Solicitation Phase as more due diligence is completed on the potential P3 project. The first evolution of the VfM analysis is the development of a business case that quantifies why the Department believes the project is viable if delivered via P3. The business case needs to reflect that P3 project delivery is financially feasible prior to issuance of the RFQ. The final version of the VfM produces a shadow bid that takes into consideration the contract documents included in the final RFP and a public-sector comparator using the Department's most appropriate non-P3 alternative delivery approach.

The Department refines the VfM analysis results as more due diligence is completed on the potential P3 project. During the Solicitation Phase, the VfM typically evolves into the quantitative analysis, where a business case describes the potential financial feasibility of the project if delivered via P3. The business case represents the Department's view on financial viability of the project. It considers the cash flows needed for the P3 Developer to





fulfill its anticipated obligations in a contract and realize a reasonable profit. The business case needs to reflect that P3 project delivery is financially feasible prior to issuance of the RFQ. As the procurement process advances and more due diligence is performed, the business case continues to be refined and evolve into a revised public-sector comparator and shadow bid used as a reference point in the procurement process. The final version of the shadow bid should take into consideration the contract documents included in the final RFP. The public-sector comparator is an updated view of total project cost using the Department's most appropriate non-P3 delivery approach.

After the issuance of the RFQ, the VfM analysis is a reference point that helps the Department to make informed decisions on how they make adjustments to successfully procure the project.

4.3.3 Preparing and Issuing a Request for Qualifications

P3 projects will follow <u>Section 3.2.3</u> requirements for preparing and issuing RFQs, except as noted below.

4.3.3.1 Request for Qualifications Composition

RFQ composition for P3 projects also include minimum qualifications and experience for O&M and financing similar projects and other modifications.

Table 4-3 lists the typical primary components (P3 differences shown in blue) of an RFQ for P3 delivery, which may be modified to accommodate project-specific issues. The following sections briefly expand on some elements of the RFQ.

RFQ Composition

SOQ Submittal Requirements Minimum Quals and Experience O&M Plan and Organization Financial Plan and Organization Quals of Key Personnel Experience/Past Performance Term Sheet Evaluation Criteria

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Table 4-3: Typical Public-Private Partnerships Request for Qualifications Contents

Typical Design-Build REO Contents		
Request for Qualifications – Primary Elements		
Primary narrative describing project, SOQ content requirements, and evaluation criteria		
 Project Goals Responsibilities of the Private-Sector Developer Basic Configuration (e.g., length of the facility, roadways included in the construction, major interchanges and connectivity) and General Location Duration of contract Procurement/Project Schedule and Milestones Project Status by Discipline Procurement Process Description Evaluation Process and Criteria/Weightings Request for Clarification Process SOQ Submittal Requirements and Formatting Protest Procedures Department Rights and Disclaimers Term Sheet (optional) 		
Request for Qualifications Forms		
Typical forms provided in the RFQ to ensure consistency in the information provided by the potential proposers		
 Acknowledgement of Receipt Department and/or Past Project Descriptions Subcontractor Information Proposer's Organization Information Principal Participant and Major Participant Certification Proposed D&C, O&M, and Financing Key Personnel Information Past Performance Safety Questionnaire RFQ Comment Form Uniform Affidavit of Certification for Preference Bidding (non-federal-aid projects only) 		
Design-Build & P3 P3-Specific		

Qualification Statement Submittal Requirements

The Department has established specific requirements for P3 projects (P3 differences shown in blue) for submittal of Statement of Qualifications (SOQ). Table 4-4 details the typical structure and contents of an SOQ for P3 delivery.





Table 4-4: Typical Public-Private Partnerships Statement of Qualifications Content

Volume I Contents

Operations & Maintenance Plan and Organization

The proposers will need to demonstrate a general understanding of the project with a plan to manage the O&M through the entire term of the contract. Additionally, the proposers will be requested to demonstrate an ability to manage other technical issues and all risks associated with P3 projects with a clear definition of the functional relationships of the proposer's team and its key personnel, particularly related to the integration of O&M considerations in the D&C process.

Financial Plan and Organization

The proposers will need to demonstrate a general understanding of the project with a reasonable plan to complete all critical tasks to achieve financial close within the time frames outlined in the RFQ.





Qualifications of Key Personnel

Qualifications of key personnel experience also will include requirements for O&M and financing projects of similar size and complexity to the project.

Experience and Past Performance of Proposer Firms

Experience and past performance of proposer firms also will include requirements to identify the best O&M firms available with demonstrated experience and a record of producing quality work on projects of similar size and complexity to the P3 project, as well as the best Financial Advisors available with demonstrated experience and a record of achieving financial close on projects of similar size and complexity to the P3 project.

Terms and Conditions Sheet (Optional)

A terms and conditions sheet coupled with cost estimates conveys that the Department is proposing a commercially reasonable and financially feasible project. This document provides background information and summarizes the major terms and conditions of the contract as envisioned during this phase. This is intended to help build strong competition that will translate to good value for the Department.

4.3.3.2 Evaluating the Statement of Qualifications

Upon receipt of the SOQs, the Department also will evaluate the financial strength of the proposer. The financial strength of the proposer and guarantors is particularly important when the P3 Developer is providing the project financing. An analysis of the financial management plan, financial statements, the credit rating, and an ability to secure similar size and type of financing for similar types of projects will be important. P3 projects also typically will require evaluation of the management plans for the D&C and O&M Stages that characterize their approach to meet the project needs.

4.3.4 Preparing and Issuing a Request for Proposals

P3 projects will follow <u>Section 3.2.4</u> requirements for issuing a request for proposals except as noted below.

4.3.4.1 Composing a Request for Proposals

Table 4-5 details the typical content for various RFP documents. Subsequent sections describe key elements of the RFP for P3 delivery.





Public-Private Partner	ships (P3) Documents	
Instructions to I	Proposers (ITP)	
Provides instruction on the RFP procurement process. Key elements include:		
 Basic Configuration Term of the P3 Agreement Project Revenues Project Goals General Scope of Work Procurement Schedule Contact and Communications Rules Conflict of Interest Considerations Site Access and Third-Party Coordination Details ATC Submittal Requirements General Format and Responsiveness/Pass-Fail Requirements 	 Evaluation and Selection Process Overview Technical Proposal Submittal Requirements Price Proposal Submittal Requirements Plan of Finance Award and Execution Process Financial Model Auditor Financial Close Process Protest Procedures Department Reserved Rights Required Proposal Forms Department-Assigned Duration to Achieve Substantial Completion 	
Design-Build P3 Cont	ract (and Appendices)	
Defines the contractual relationship between the Departm operations, maintenance, and financin	ent and P3 Developer throughout the design, construction, g of the project. Key elements include:	
 Components; Interpretation of Contract Documents Obligations of P3 Developer during the Design, Construction, Operations, Maintenance, and Financing of the Project Basic Configuration Information Supplied to P3 Developer Timeframe, Schedule, and Progress Control of Work Access to Site; Utility Adjustments; Environmental Mitigation; Cooperation with Local Agencies Subcontractors and Labor Performance and Payment Bonds Financial Reporting Refinancing Gain Changes in Ownership 	 Insurance Site Security; Maintenance and Repair; Title Warranties Compensation and Relief Events Suspension, Termination for Convenience, & Default Liquidated Damages; Failure to Open Lanes Limitation of Liability and Indemnification Partnering and Dispute Resolution Acceptance Documents and Records Value Engineering Cooperation and Coordination with Other Contractors and Adjacent Property Owners Miscellaneous Provisions Supporting Appendices to the Contract 	
Technical Provision	s (and Attachments)	
Specifies the technical requirements by which the project is to Key eleme	be designed, built, operated, and maintained, as appropriate. nts include:	
 General Scope of Work Quality Management System (QMS) Design Quality Management Construction Quality Control, Oversight, Acceptance O&M Quality Control, Oversight, Acceptance Landscape and Aesthetics Public Involvement Environmental Drainage Roadway Pavement Traffic Maintenance of Traffic 	 Geotechnical Structures Signals and Lighting Signs and Pavement Markings Railroad Coordination Utilities Intelligent Transportation Systems (ITS) Operations & Maintenance Requirements Handback ROW Acquisitions Stormwater Quality Submittals Standards and Reference Supporting Attachments to the Technical Provisions 	
Reference Information	on Documents (RIDs)	
Provides information for all proposers/P3 Developer; use o otherwise noted in the Contrac	f RIDs is at the proposer's/P3 Developer's sole risk, unless ct. Key elements could include:	
 Preliminary Plans and Details (e.g., Reference Design) Preliminary Drainage Reports and Related Information Utility Information (e.g., potholing data, maps) and the Utility Impact Matrix Relevant As-Built Documents (e.g., Third-Party, Utilities) Standards and References Genterchnical Data Report and Related Information 	 NEPA Documents (e.g., CatEx, EA/FONSI, EIS/ROD) Planned ROW Limits, including the ROW Figure Traffic Analysis Information Third-Party Agreements and Plans Hazardous Material Information Maintenance Records 	

Table 4-5: Typical Public-Private Partnerships Request for Proposals Documents

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Public-Private Partnership Instructions to Proposers

The purpose of the ITP is to establish the rules and procedures that proposers must follow when preparing and submitting their proposals. The ITP for P3 delivery typically includes the DB requirements with the addition of the following:

- Basic Configuration: P3 projects typically allow greater flexibility than other non-P3 alternative delivery approaches. As a result, the project's basic configuration plays a central role in allowing innovation with minimal constraints on the type of connectivity and number of lanes needed for the delivery of the desired project scope. For example, in the DB delivery model, the available ROW is often the primary constraint in the project configuration. P3 projects may be more complex and the corresponding configuration parameters will need to be provided in detail but still allow for the desired level of innovation.
- Operations and Maintenance: The ITP includes detail regarding the O&M scope, to allow proposers to develop a bid. Details related to required key personnel specific to O&M typically are included, along with requirements for a narrative regarding the approach to managing the O&M work.
- Finance Approach: The ITP typically requires a plan of finance and a narrative to describe the plan of finance plan—the narrative includes detail regarding the type of debt to finance and deliver the project, including equity. The ITP also includes further details to confirm financial feasibility of the proposer and the project (e.g., rating letters).
- **Financial Model Requirements**: A financial model typically is required to be submitted to the Department as part of the proposal package. The ITP includes the requirements for content, format, and functionality of the financial model.
- Financial Model Auditor: A third-party contractor hired by the P3 Developer or the Department will complete an independent audit of the best value proposer's financial model. The Department shall be expressly identified in the audit report as an entity entitled to rely upon such audit. The financial model will be used for the calculation of compensation for project changes and delays, as well as for termination events.

Public-Private Partnership Contract

The purpose of the contract and related appendices is to provide the terms and conditions between the Department and the P3 Developer. Risk allocation for P3 delivery is like DB delivery. Additional provisions will address elements related to the D&C and O&M Stages and use of private finance. However, additional elements typically considered include:

Existing Infrastructure: Depending on the allocation of O&M responsibility, the condition of existing infrastructure may have a significant impact on risk potential. If the scope requires proposers to have responsibility for life cycle O&M of existing infrastructure, risk may have a significant impact on pricing. The Department should provide as much information as possible during procurement regarding any existing infrastructure to mitigate such risk.





- Condition of Elements at End of Term: The Department wants to receive assets in reasonable condition without significant costs needed at the end of the contract. Handback provisions in the contract should mitigate this risk.
- Public Payment Risk: Creditworthiness and appropriations risks are issues typically understood by the industry, but the Department needs to be ready to provide clear commitment and demonstrate ability to make payments for milestone payments, availability payments, compensation events, and termination compensation. Details of funding sources and process may mitigate this risk.
- Accuracy of Shadow Bid: Accuracy of cost estimates (e.g., construction, O&M, financing, etc.) and risks assumed in the shadow bid is critical for a reliable financial analysis. Sufficient engineering development prior to and during procurement may mitigate this risk.
- Interest Rate Fluctuation: Since interest rate assumptions have a material impact on project financial analysis, delays to project procurement and pricing may lead to unreliability of financial analysis outputs.
- **Emerging Technology**: It is important to construct the P3 Contract to ensure the risks and proceeds from new business opportunities are equitably shared.

Developing a Public-Private Partnership Compliance System P3 projects rely on a non-compliance event system to confirm and enforce compliance with the contract. The non-compliance events system will require the P3 Developer to comply with contract requirements to perform administrative and management functions, make timely, accurate submittals, and adhere to quality procedures and meet or exceed the performance requirements for the facilities for which they are responsible.

The non-compliance events system is important for a DBFOM with availability payments, where P3 Developer default is not a reasonable mechanism for ensuring compliance and the Department needs a reliable mechanism to make deductions from milestone payments or availability payments to ensure appropriate performance.

During the Solicitation Phase, the Department will prepare non-compliance event tables to govern activities that occur during the D&C O&M Stages. The non-compliance event tables will describe the event, address time frames to resolve the issue, and provide the payment deduction associated with non-compliance. The non-compliance event tables will be included in the contract.

Developing a Lane Closure Deduction System

Since the P3 Developer will be responsible for activities during the D&C and O&M Stages, performance measures are needed to ensure the P3 Developer places the right value on the consequences of its actions to achieve the best outcome for road users when performing D&C and O&M work.

During the Solicitation Phase, the Department will establish a lane closure deduction system to encourage the safe and efficient conduct of normal maintenance with minimum impact to road users. The system includes consequences for the P3





Developer if lane closures are necessary to correct design, construction, or materials failures associated with the work conducted during the D&C or O&M Stage. The Department's lane closure tables will apply to the payment deduction value related to time of day, stage of the project (e.g., D&C, O&M), and location/segment. The Department should calibrate the financial implications of the P3 Developer's failure to keep lanes open according to anticipated impact.

Public-Private Partnership Performance-Based Technical Provisions

Performance-based technical provision requirements are similar to DB projects, except they will contain fewer prescriptive elements to foster innovation and efficiency. Also, the technical provisions organizationally will have the following four additional sections:

- Operations & Maintenance Requirements: Provides the specific O&M-related performance specifications for the condition of the asset over the entire period of the contract.
- Handback Requirements: Provides a process for determining and completing repairs and maintenance needed to be performed prior to handing the project back to the Department.
- **Baseline Condition Assessment**: Provides the minimum baseline condition of the existing assets that the P3 Developer must maintain during construction.
- **Non-Compliance Points Regime**: Provides a definition of what will be considered non-compliant by the Department and the consequences of non-compliance.

Reference Information Documents

Reference Information Documents (RIDs) will contain maintenance records applicable to the O&M requirements.

4.3.4.2 Issuing a Request for Proposal

Issuing a final RFP also includes the specific consideration of the O&M, financing, and handback requirements.

4.3.4.3 Submitting and Reviewing Alternative Technical Concepts

Each ATC submitted must address any changes in operational and maintenance requirements including ease of operations or maintenance and any changes in handback procedures or the anticipated life an element of the project associated with the ATC.

Section 4.4 Procurement Process: Evaluation Phase

P3 projects will follow <u>Section 3.3</u> requirements for the Evaluation Phase (Figure 4-7) except as described below.







Figure 4-7: Public-Private Partnerships Project Delivery Process – Evaluation Phase

4.4.1 Evaluation Phase Roles, Responsibilities, and Organization

P3 projects will follow the requirements for organization, personnel, and roles and responsibilities described in <u>Section 3.3.1</u> with the addition of external Service Providers specializing in financial, insurance, and O&M that are familiar with P3 procurement, the personnel qualifications, and performance requirements as described in <u>Section 4.2.1</u>.

In addition, the Price Proposal Committee (PPC) will have an expanded role as described below.

Price Proposal Committee

The PPC is an independent committee, also called the financial sub-committee, that reviews the price proposal for balance and calculates each price proposal score using an established formula in the ITP. The PPC will also complete an assessment of each proposer's approach and ability to execute their plan of finance, including verifying the accuracy and reasonableness of the financial model in supporting the proposal and the financial strength of each proposer and any guarantors.

4.4.2 Evaluating Proposals

P3 projects will follow <u>Section 3.3.4</u> requirements for proposal evaluation. Additional elements considered in the proposal evaluation for P3 projects include:

- Approach to O&M management.
- Demonstration of reasonableness of the financial proposal and financial capacity of the proposer and any guarantors.
- Validation of the proposal for consistency with the ITP (including the financial model).

Evaluating Proposals Responsiveness – Pass/Fail Calculating Price Proposal Review Process Price Score Formula Public Sector Comparator Shadow Bid Ranking and Recommending Requesting Clarifications Developing BAFO

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Because the Department evaluators of the proposal do not typically have the expertise to evaluate the approach to O&M, the O&M Advisors typically perform these assessments and related evaluation tasks and report the results and answer any questions for the Department evaluators' acceptance and approval.

NDOT leadership may also review the proposals and attend evaluation committee meetings in order to better understand the proposals and the recommendations provided during the evaluation process.





As described in <u>Section 4.4.1</u>, the financial proposal and financial capacity of the proposer and any guarantors are the PPC's responsibility. Because the PPC typically does not have the expertise to evaluate the financial model nor the financial strength of the proposer and guarantors, the Financial Advisors generally perform these assessments and related evaluation tasks and report the results and answer any questions from the PPC and for the PPC's acceptance and approval.

4.4.2.1 Calculating the Price Proposal Score

P3 projects price proposal scoring typically is based on the lowest first-year Maximum Availability Payment (MAP). The PPC will conduct an independent review and evaluation of each price proposal. The PPC also will complete an assessment of each proposer's approach and ability to execute their plan of finance including the financial strength of each of the proposer and any guarantors.

The Department may establish the overall ranking of proposals using a best value methodology that considers a combination of the technical proposal and price proposal. The PAT will review the PPC's assessment of each proposer's approach and ability to execute their plan of finance, including the financial strength of each of the proposer and any guarantors.

Value for Money Comparison

Prior to undertaking further evaluation, the lowest price proposal needs to be compared to the public-sector comparator and shadow bid as described in <u>Section 4.2.1.1</u> as a reference point to gain an understanding of the reasonableness of the best value proposal.

Section 4.5 Procurement Process – Award Phase

Figure 4-8 and the following sections outline the process to complete the Award Phase.

Award Phase Requirements Notice of Intent to Award Negotiation and Conform Contract Obtaining FHWA Concurrence Issuing Public Notice Review and Ratify Executing Contract Financial Close Debriefings Filing a Protest

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Figure 4-8: Public-Private Partnerships Project Delivery Process – Award Phase

4.5.1 Award Phase Roles, Responsibilities, and Organization

P3 projects will follow the requirements for organization, personnel, and roles and responsibilities described in <u>Section 3.3.1</u> except that the Maintenance Engineer or District Maintenance Engineer and the financial, insurance, O&M, and other technical advisors will also be involved to support the Contract Compliance Manager with the contract negotiations and identifying proposal commitments offered as part of the proposal along with other closing-related tasks.

4.5.2 Obtaining Federal Highway Administration Concurrence (as applicable)

P3 projects will follow <u>Section 3.4.4</u> requirements for obtaining FHWA concurrence; however, due to the complexity of P3 projects, the Department may need to update the FHWA/Department Stewardship and Oversight Agreement to address changes to the process to meet the needs of the program.

4.5.3 Financial Close

Concurrent with the activities related to contract execution, financial close activities are being undertaken by the P3 Developer to have financial close occur within a few months after contract execution. Financial close is required for the D&C activities to begin.





Section 4.6 Contract Administration Phase

P3 projects generally will follow <u>Section 3.5</u> requirements for the Contract Administration Phase, with the exception that the Department will be focused on achieving the performance measures established in the contract.

The D&C and O&M Stages that occur during the Contract Administration Phase add to the complexity of this delivery method (as illustrated in Figure 4-9). The P3 Developer will be responsible for quality assurance and quality control (QA/QC). An Independent Quality Firm can perform quality acceptance. The Department will be performing an audit role for contract compliance.



Figure 4-9: Public-Private Partnerships Project Delivery Process – Contract Administration Phase

4.6.1 Design & Construction Stage Roles, Responsibilities, and Organization

P3 projects will follow the requirements for organization, personnel, and roles and responsibilities described in <u>Section 3.5.1</u> except as noted below. The organizational chart, shown on Figure 4-10, shows the reporting relationship and the following sections detail the roles and responsibilities for those involved in the Contract Administration Phase during the D&C Stage.

D&C Roles and Responsibilities Dept Project Manager Design Compliance Construction Compliance O&M Compliance Manager Contract Compliance Service Providers Independent Quality Firm • Design-Build & P3 • P3-Specific





4.6.1.1 Department Roles and Responsibilities (D&C Stage)

Project Manager The PM also will have responsibility for managing O&M activities during construction.

Department Leads (Design, Construction)

P3 projects will follow the DB requirements for the Design Compliance Manager and Construction Compliance Manager for these two similar roles.

O&M Compliance Manager

Collaborating directly with the PM on maintenance-related activities, the O&M Compliance Manager is



Figure 4-10: Public-Private Partnerships Contract Administration Organizational Structure – Design & Construction Stage

responsible for auditing the P3 Developer's monitoring, scheduling, executing, and maintenance work of the existing assets during the D&C and O&M Stages of the newly constructed assets as they are completed. The O&M Compliance Manager responsibilities include:

- Ensuring a reasonable schedule for routine and major maintenance is developed for the project.
- Ensuring a successful handoff from the Department to the P3 Developer for the maintenance of existing assets occurs.
- Auditing the inspection, sampling, and testing of all project maintenance materials and workmanship is completed in accordance with the contract documents.
- Working with the Independent Quality Firm to implement a tracking system to monitor that non-conforming materials are identified, and disposition of nonconforming materials is properly addressed.
- Assisting in preparation of maintenance-related non-conformance reports and taking corrective actions within the time frames outlined in the contract.





 Ensuring non-compliance points are assessed, recovery plans are received from the P3 Developer, and availability payments are reduced in accordance with the contract.

Contract Compliance Manager

The Contract Compliance Manager also will be responsible for auditing the results of the P3 Developer's quality and project management processes for compliance with the contract. This includes the P3 Developer's compliance with the O&M PMP.

Service Providers

Service Providers may support the Department in fulfilling any of the roles under the PM. In addition, the following roles may also be provided through Service Providers:

- An Independent Quality Firm to help with quality management.
- O&M expertise to assess cost estimates related to potential construction change orders that may impact O&M elements and to monitor compliance with performance requirements for O&M during construction.
- Financial Advisors to assess impact of change orders on the overall financial model that may affect milestone payments and availability payments.

Independent Quality Firm

The Independent Quality Firm is a Service Provider typically hired and contracted through the P3 Developer. However, in addition to responsibilities of the Independent Quality Firm to the P3 Developer, the Independent Quality Firm may also provide a duty of care to the Department. The Independent Quality Firm may serve as an independent party to determine if the work completed by the P3 Developer is acceptable per the terms and conditions of the contract. The Independent Quality Firm will report to both the Department and the P3 Developer regarding the acceptability of the P3 Developer's work and will also raise concerns with performance to the Department, if any related issues are identified. The Department will clearly convey the scope of the Independent Quality Firm in the technical provisions, and this scope may be modified on a project-specific basis.

4.6.1.2 P3 Developer Roles and Responsibilities (Design & Construction Stage)

The following roles will have additional responsibilities as noted below:

Public-Private Partnership Developer Project Manager

Managing the O&M activities during D&C and ensuring that the objectives are achieved for this work in accordance with the approved management plans.

Public-Private Partnership Developer Lead Engineer

Ensuring that O&M life cycle improvements performed by the P3 Developer during D&C is compliant with the technical engineering requirements and contract documents.





Public-Private Partnership Developer Construction Manager

Managing construction work performed by the P3 Developer related to O&M life cycle improvements during D&C to ensure compliance with the material and construction-related requirements of the contract documents.

Public-Private Partnership Developer Operations & Maintenance Manager The P3 Developer's O&M Manager is responsible for managing the maintenance-related work during the D&C and O&M Stages. The O&M Compliance Manager responsibilities during D&C include:

- Providing input into the infrastructure design to facilitate maintenance over the term of the contract.
- Developing a reasonable schedule for routine and major maintenance to meet performance standards in the contract for the existing infrastructure during the D&C Stage.
- Managing the O&M budget in accordance with the PMP.
- Managing the performance of O&M work including safety and environmental compliance.
- Ensuring that the quality processes are completed in accordance with the Quality Management Plan (QMP), including data collection and distribution.
- Working with the Independent Quality Firm and the Department to resolve nonconformance issues.
- Ensuring that all O&M crews are trained in safety and environmental compliance, recognizing defects and appropriate procedures for emergency incident situations.
- Developing all required plans, cooperating where appropriate with local entities.

4.6.2 Design and Construction Stage, Notice to Proceed 1 Activities

P3 projects will follow <u>Section 3.5.2</u> requirements for NTP1 activities except as noted below.

Communicating and Coordinating

Communication and coordination for P3 projects will extend through the O&M Stage.

Updating the Department Project Management Plan for the Contract Administration Phase

The Department's PMP is updated to include O&M activities and Independent Quality Firm coordination.

Notice to Proceed 1 Communicating and Coordinating Department PMP P3 Developer PMP Mobilizing Developing Baseline Schedule Completing DBE & Diversity Plans Setting up EDMS Dispute Review Team

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Development of the Public-Private Partnership Developer Project Management Plan

The P3 Developer's PMP will include a chapter on the O&M QMP to describe the strategy to develop a plan to meet the performance based technical requirements in the contract.





Developing a Project Baseline Schedule

A project baseline schedule will also include O&M activities of the existing assets during the D&C Stage. Additionally, a schedule will be maintained during the O&M Stage allowing communication of planned maintenance. Handback activities near the end of the contract term also will be included in the schedule at the appropriate time during the O&M Stage.

Setting Up an Electronic Document Management System

An electronic document management system (EDMS) will also address document management during the O&M Stage of the P3 project.

Establishing a Dispute Review Team

A dispute review team (DRT) will remain in place through the O&M Stage.

4.6.3 Design and Construction Stage, Notice to Proceed 2 Activities

P3 projects will follow <u>Section 3.5.3</u> requirements for Notice to Proceed 2 (NTP2) activities, except as described below.

Confirming Compliance

P3 projects rely primarily on a non-compliance events system described in the contract for confirming and ensuring compliance during the D&C Stage. Failure to maintain compliance will result in monetary deductions of milestone payments from the Department to the P3 Developer during the D&C Stage. If a persistent nonNotice to Proceed 2 D&C Stage Confirming Compliance D&C Acceptance Transition of O&M Resp. Issues and Risk Managing Change Monitoring Other Activities Payment and Progress Substantial Completion D&C Closeout

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compliance event results in certain thresholds established in the contract to be exceeded, further consequences, including increased Department oversight and P3 Developer default, are possible.

The P3 Developer is responsible for self-reporting non-compliance events and must keep an accurate database record of all such events. However, periodic audits by the Department related to activities in the non-compliance events tables during the D&C Stage may identify and initiate assessment of a non-compliance event deduction. The Department also may treat failure of the P3 Developer to self-report a non-compliance event as a separate non-compliance event.

When a non-compliance event occurs during the D&C Stage, the monetary deduction will be applied to the next milestone payment (if the Department is making milestone payments), consistent with the value identified in the contract. If there are no milestone payments, the Department typically will apply the monetary deduction to the first availability payment.

Design & Construction Acceptance

The P3 Developer will be responsible for requirements for final acceptance, with the exception that the P3 Developer will be responsible for QA/QC, the Independent Quality





Firm will perform quality acceptance, and the Department will perform an audit and oversight role for contract compliance for construction and O&M activities.

Transition of Operations & Maintenance Responsibilities for Existing Facilities

As part of the P3 Developer's responsibility to control activities during the D&C Stage the existing pavement, earthwork, drainage, and structures must be maintained to a performance baseline for each of these elements in accordance with the contract.

Managing Change

Requirements for managing change will extend through the O&M Stage. The contract may address unique elements related to change management of P3 projects, including, but not limited to:

- Compensation to P3 Developer due to missed availability payment(s) as a result of contractually allowed events that delay substantial completion.
- Delay of milestone payment(s) to P3 Developer as a result of contractually allowed events that delay substantial completion.
- Payment of extra work costs through modification of availability payments.
- Impacts of claims on non-compliance points and deductions.
- Adjustments to availability payments that result from change orders to extra work costs.

Overseeing Payment and Progress

Oversight of payment and progress for P3 projects follows DB project procedure if milestone payments are to be provided for the completion of certain project elements, as described in the P3 Contract. However, certain elements vary compared to DB due to the long-term nature of P3 projects and use of private finance. Milestone payments may be subject to deduction based on compliance as described earlier in this section.

For a DBFOM project, the lenders to the P3 Developer require the services of a lender's technical advisor to verify earned value and recommend any funding for distribution of funds during the D&C Stage. Typically, the level of effort for the Department to verify payments may be reduced due to the additional oversight provided by the lender's technical advisor. However, the Department must still provide appropriate due diligence in oversight of payments that may include review of percent of D&C work completed and verification of QA/QC testing completion. Generally, the P3 Developer issues payment certificates to the lenders with signatures of the lender's technical advisor and Independent Quality Firm. Upon receipt of payment certificates, the lenders allow the draw-down of funds to the P3 Developer's account to pay for D&C Stage work. The Department receives a copy of this certificate, but typically does not retain a right to withhold or otherwise intervene in payment.

Payments during the O&M Stage are made as availability payments and are typically not made during the D&C Stage. Availability payments can be described as periodic payments made to the winning team over the life of the long-term contract, subject to the





project continuing to meet various performance requirements (e.g., the project is to be available for use by the public in its final configuration and maintained in accordance with the performance-based technical provisions in the P3 Contract).

4.6.4 Design and Construction Stage Closeout

P3 projects will follow <u>Section 3.5.4</u> requirements for project closeout of the D&C Stage of the P3 project, except as noted below.

Design & Construction Warranty Period and Department Compliance Checks

In parallel with the warranty period, the Department completes its internal compliance checks. No warranties, unless otherwise required by the contract, would apply at this time unless some portions of the P3 project are transferred back to the Department prior to commencement of the O&M Stage.

Invoicing and Approving Design & Construction Final Payment

The payment structure for a P3 project may include milestone payments and typically includes availability payments. The contract will establish a set of conditions necessary to achieve any milestone payment or the first availability payment, including one similar to final acceptance for construction. The final payment in a P3 project will be the last availability payment and will be made consistent with NRS 408.363 and 408.387.

4.6.5 Operations & Maintenance Stage Roles, Responsibilities, and Organization

P3 projects will follow the requirements for organization, personnel, and roles and responsibilities described in <u>Section 3.5.1</u> except as noted below. The organizational chart on Figure 4-11 shows the general reporting relationship for those involved in the Contract Administration Phase during the O&M Stage.

O&M Roles and Responsibilities Dept. Management Dept. Project Manager Independent Quality Firm P3 Developer Management P3 Developer Project Manager

Design-Build & P3 P3-Specific



Figure 4-11: Public-Private Partnerships Contract Administration Organizational Structure – Operations and Maintenance Stage





Department Management and Project Manager

Department Managers (including the District Engineer's construction and maintenance staff) and the assigned PM will oversee the contract during the O&M Stage. Oversight roles will include auditing of the results of the P3 Developer's quality and project management processes for compliance with the contract during the O&M Stage, the P3 Developer's compliance with the O&M PMP, and, if applicable, the D&C PMP for preventative maintenance work. The District Engineer's acceptance will be required for O&M-related final acceptance of the work and any related handback.

Public-Private Partnership Developer Operations & Maintenance Management and Project Team

The P3 Developer O&M Management Team will include an organizational structure that meets the needs of the P3 project. This team may have responsibilities for all aspects of O&M within the project limits or limited O&M responsibilities for specific project elements or activities as defined in the contract. At a minimum, the team will have the following responsibilities:

- Adhering to the O&M PMP, the QMP, and the contract documents for the performance of O&M work.
- Managing the O&M budget and processing availability payments in accordance with the contract.
- Ensuring that the quality processes are completed in accordance with the QMP, including data collection and distribution.
- Working with the Independent Quality Firm and the Department to resolve nonconformance issues.
- Ensuring that all O&M crews are trained in safety and environmental compliance, recognizing defects, and appropriate procedures for emergency incident situations.
- Developing all required plans and cooperating with local entities, where appropriate.
- Performing O&M activities in accordance with the contract to ensure the successful handback and transition of assets occurs prior to final project closeout.

4.6.6 Operations & Maintenance Stage, Notice to Proceed 3 Activities

The duration and timing of various activities during the O&M Stage are typically at the discretion of the P3 Developer. Timing of life cycle improvements should not be dictated by the Department due to the use of a performance-based compliance approach in the contract. However, some elements (e.g., handback) will need to follow a set schedule as established in the contract.

Notice to Proceed 3 O&M Stage Monitoring Performance Managing Change Handback Stage Contract Completion Final Project Closeout

Design-Build & P3 P3-Specific

Notice to Proceed 3 (NTP3) marks the beginning of the full-scale O&M Stage. Once all the deliverables and activities for NTP2 are completed, the team will transition into NTP3. Approximately six months prior to final acceptance of construction, the Department and the P3 Developer will work together to update the O&M PMP to reflect the needs of the newly





constructed facilities and finalize the organizational structure to manage the O&M aspects for the project. The O&M PMP will describe the planned major, routine (includes preventative) maintenance, and operating activities of the P3 Developer. The Department will review and approve the O&M PMP for enabling the Department to effectively monitor the P3 Developer's compliance with the requirements in the contract.

4.6.6.1 Monitoring Project Performance

During the O&M Stage, the P3 Developer will maintain a comprehensive maintenance management system, which provides information on the condition, activities, and work history associated with all assets on the project. The Developer should update the system on a frequent basis and the Department may audit the system to confirm the data.

The P3 Developer will submit periodic invoices in accordance with the contract and monthly performance report addressing work performed for the prior month. The project report and invoices will reflect occurrence of non-compliance events and lane availability deductions for the period, as further described below. The Department will review the invoice to confirm accuracy and completion prior to making payment. The monthly performance report also will include details regarding major and routine maintenance, scheduled activities for the next period, and summary of quality audits.

The P3 Developer will provide annual reports providing information related to meeting maintenance performance requirements, inspection logs, explanation of progress toward achievement of handback requirements (if applicable), recommended repairs, condition ratings, and traffic information.

For major maintenance work, the P3 Developer should provide a five-year work schedule identifying the plan to repair, replace, or renovate all assets and components of the project. Additionally, a detailed one-year routine work schedule should be provided, consistent with the five-year major maintenance work schedule. The P3 Developer should perform major maintenance work in accordance with the same contract requirements used during the D&C Stage, including Department reviews.

The Department has authority to audit the activities and records of the P3 Developer in accordance with the contract to confirm performance. However, the P3 Developer is responsible for self-reporting non-compliance events during the O&M Stage and must keep an accurate database record of all such events. Periodic audits by the Department, related to activities in the non-compliance events tables during O&M, may identify and initiate assessment of a non-compliance deduction. Failure of the P3 Developer to self-report a non-compliance issue may also be treated as a separate non-compliance event.

P3 projects rely primarily on a non-compliance events system described in the contract for confirming and ensuring compliance. The system is updated and adapted to apply to the O&M Stage and relevant non-compliance elements, including condition of pavement, earthwork, drainage, and structures. Failure to maintain compliance will result in monetary deductions of availability payments from the Department to the P3 Developer during the O&M Stage. Like the D&C Stage, persistent non-compliance may result in the violation of certain thresholds established in the contract resulting in further consequences, such as increased Department oversight and P3 Developer default.





P3 project performance during the O&M Stage must consider lane availability. The P3 Developer will need to adhere to the requirements of the lane closure deduction system as described in <u>Section 4.3.4.1</u>. When a non-compliance event occurs or lane closure deduction is necessary during the O&M Stage, the Department will apply the monetary deduction to the next availability payment, consistent with the value identified in the contract.

Prior to the actual handback of the facility, the Department should assess the specific handback-related risks based on the performance of the facilities over the term of the contract to provide input into decision-making for the handback process.

4.6.6.2 Managing Change during Operations & Maintenance Stage

Change management during the O&M Stage generally should be the same as the D&C Stage. However, the contract will address limitations of when the P3 Developer may request a change order. The Department typically is not responsible for changes in cost for meeting performance requirements in accordance with the contract, as these are obligations of the P3 Developer.

4.6.7 Handback Stage

Generally, five years prior to the termination of the contract, the Department and the P3 Developer will work together to develop a plan for the P3 Developer to establish a process for evaluating the condition of project assets and determine the repairs and maintenance that need to be undertaken prior to the termination of the contract to return the project back to the Department in good condition, as described in the contract.

4.6.8 Achieving Contract Completion

As the project has successfully reached final acceptance of the D&C Stage, the O&M Stage, and the Handback Stage, The Department closes out each stage with the transfer of technology and assets back to the Department. At this point, there should be no additional checklists or closeout items, except if there are any unexpired warranty periods that extend beyond the term of the contract.

4.6.9 Final Project Closeout

P3 projects generally will follow steps outlined in <u>Section 3.5.4</u> with respect to achieving final acceptance and project closeout, but the focus will be on the contract requirements for the O&M Stage. The Department closes the project once final payment is made, internal documentation completed, and project files are compiled and delivered to Central Records.





CHAPTER 5 UNSOLICITED PROPOSALS





Chapter 5 Unsolicited Proposals

Section 5.1 Introduction

An Unsolicited Proposal (UP) is a submittal by the private sector that is not initiated by the Department to develop, finance, construct, improve, operate, and/or maintain a transportation project. The focus of this Chapter is on the UP Identification Phase, which includes how the Department receives, screens, and evaluates a UP to determine next step recommendations for Nevada Transportation Board (Board) approval.

Unlike the Identification Phase described in <u>Section 1.4</u>, the Department's UP Identification Phase allows projects to be introduced to the project planning/delivery process directly from an outside entity.

Upon Board approval, there are two options for delivering UP projects, which generally are depicted on Figure 5-1.

- 1. The project will be delivered through a competitive procurement process in accordance with these Pioneer Program Guidelines.
- 2. The UP is accepted, which would lead to negotiations with the proposer without any type of competitive procurement (i.e., sole source negotiation).



Figure 5-1: Unsolicited Proposals Identification Phase Process

Note: While Nevada Revised Statutes (NRS) 408.5471 et. seq. gives the Department authority to accept and negotiate a UP without any type of competitive procurement, in most instances, the Department will utilize a competitive procurement process. In the event the sole source delivery option is selected,





completing the negotiation process could take several months. In addition, the proposed use of Private Activity Bonds (PAB) or other federal financing or funds will affect the Department's ability to approve a sole source approach.

5.1.1 Roles and Responsibilities

The organizational chart on Figure 5-2 shows the reporting relationship and the following sections detail roles and responsibilities for those involved in the UP Identification Phase.

Pioneer Program Director (Deputy Director)

The Pioneer Program Director (PPD) oversees all activities related to UPs, including reporting status to the Department Director, liaising with other public agencies, ensuring compliance with current statutes and regulations, and overseeing public relations, stakeholder coordination, and informational outreach to the public and local, state, and federal agencies. As a UP is submitted and progressed, the PPD reviews all recommendations during the various review and evaluation processes.

Pioneer Program Manager (Chief, Project Management)

The Pioneer Program Manager (PPM) is responsible for ensuring compliance with guidelines established by the Pioneer Program and that appropriate coordination



Figure 5-2: Unsolicited Proposals Identification Phase Organizational Structure

with other agencies and stakeholders is taking place. As part of his/her duties, the PPM assigns a Project Manager (PM) to lead various UPs and subsequent project activities. The PPM reviews reports developed by the PM and provides report results and recommendations to the PPD. The PPM with support of the PM will communicate the status and key elements of the UP with the Director's Office on a periodic basis throughout the evaluation process.

Project Manager

The PM manages an assigned UP through identification, qualitative screening, quantitative evaluation, and potential sole source negotiation or competitive procurement, depending on the results and recommendations of the Identification Phase. The PM is responsible for managing scope, schedule, budget, staffing requirements, and risks, and for reporting project status and performance to the PPM.





Service Providers

The Department may retain individuals or firms to assist with the Pioneer Program and related projects. Technical, legal, financial, traffic, revenue, and insurance Service Providers under contract with the Department or through a sub-service provider agreement can provide the resources and expertise necessary to support the process.

Project Review Team

The PM establishes and leads the Project Review Team (PRT), who supports all aspects of the UP Identification Phase.

The PRT is comprised of the Proposal Evaluation Team (PET) and the Project Selection Committee. Both teams consist of Department staff. The PRT may also include representatives of affected local, state, and federal agencies, each having expertise to support qualitative screening and/or quantitative evaluation. At the discretion of the PM (and as approved by the PPM), the Department may also engage qualified Service Providers to support the PRT's efforts.

The PM will ensure that appropriate internal Department representatives integrate external stakeholders (such as affected local agencies, Federal Highway Administration [FHWA], the State Attorney General's Office, the State Controller's Office, and the State Treasurer's Office) and the Service Providers into the UP Identification Phase, as appropriate.

Procurement Administration Team

Upon receipt of a UP, the Project Administration Team (PAT), comprised of staff from Agreement Services, the Attorney General's Office, and/or Service Providers, will support the PM in completing the various tasks described in <u>Section 2.2.1</u>.

Observers

Observers may attend to observe the UP screening and evaluation process. Observers are appointed by the PPM and may consist of representatives from the Director's Office, Department's legal counsel, FHWA, the Project Management Division, and/or Agreement Services.

Section 5.2 Identification Phase

The UP Identification Phase details the process by which the Department receives, screens, and evaluates a UP to determine if it:

- 1. Meets the submittal requirements.
- 2. Includes enough merit for consideration and has the attributes necessary for successful project delivery.
- 3. Is desirable and has potential for success and/or presents too much risk or inadequate benefit to the Department and the public.

The UP Identification Phase consists of seven sequential steps, illustrated in Figure 5-3 and summarized below.







Figure 5-3: Unsolicited Proposals Identification Phase Overview

- Application Process Step 1 is initiated by the private sector and includes submittal requirements and fees.
- <u>Completeness Review Step 2</u> involves the PAT leading a review of the UP to verify its completeness and compliance with submittal requirements.
- <u>Qualitative Screening Step 3A</u> entails a high-level screening to determine the UP's initial merit and if the UP contributes to the Department's goals and objectives.
- Intergovernmental Review Step 3B allows an opportunity for a governmental entity potentially impacted by the project to provide comments on the proposal.
- <u>Quantitative Evaluation Step 4</u> involves the Department's detailed evaluation that includes a more-in-depth submittal review and thorough due diligence analysis.
- <u>Department Director's Review Step 5</u> centers on the Department Director considering the results of the evaluation process and determining next steps for FHWA review and Board final recommendations.
- <u>FHWA Review Step 6</u> engages FHWA on projects that will require a federal action or federal participation.
- <u>Board Approval Step 7</u> involves approval of the most appropriate action related to the UP (i.e., sole source negotiations, competitive procurement for a project, or rejection of the UP).

Generally, the Department will use the process shown on Figure 5-3 to complete review of a UP. However, the Department reserves the right (at its sole discretion) to streamline, modify, and/or shorten a process by omitting or combining steps. The Department may reject (at its sole discretion) a UP that it deems to be incomplete. The Department may also request





additional information or clarifications from a proposer at any time in the process. Failure of the proposer to provide the requested information within the specified time may be deemed as the proposer withdrawing the UP. The Department will determine the time period allowed for responding based on the type and extent of information requested. Lastly, the Department may (at its sole discretion) reject a UP at any time and for any reason.

The Director's Office will be periodically informed throughout the UP screening and evaluation process regarding the status and key elements of the UP to ensure alignment with the Department's goals and priorities.

5.2.1 Application Process – Step 1

The purpose of the application process is to clearly define the submittal requirements to be included by a proposer submitting a UP. The Department has developed an Instructions to Unsolicited Proposers (ITUP) (<u>Appendix I</u>) that provides details to further define the summary of submission requirements described below and includes associated forms to be completed by a proposer.

5.2.1.1 Unsolicited Proposals Submittal Requirements

Pursuant to NRS 408.5475, a UP must be accompanied by, at a minimum, the following information:

- A topographic map indicating the location of the transportation facility.
- A description of the transportation facility, including, without limitation, the conceptual design of the transportation facility and all proposed interconnections with other transportation facilities.
- The projected total cost of the transportation facility over its life and the proposed date for the development of or the commencement of the construction of, or improvements to, the transportation facility.
- A statement setting forth the method by which the person submitting the request proposes to secure all property interests required for the transportation facility. The statement must include, without limitation:
 - The names and addresses, if known, of the current owners of any property needed for the transportation facility.
 - The nature of the property interests to be acquired.
 - Any property that the person submitting the request proposes that the Department condemn.
- Information relating to the current transportation plans, if any, of any governmental entity in the jurisdiction of which any portion of the transportation facility is located.
- A list of all permits and approvals required for the development or construction of, or improvement to the transportation facility, from local, state, or federal agencies and a projected schedule for obtaining those permits and approvals.





- A list of the facilities of any utility or existing transportation facility that will be crossed by the transportation facility and a statement of the plans of the person submitting the request to accommodate such crossings.
- A statement setting forth the general plans of the person submitting the request for financing and operating the transportation facility, which must include, without limitation:
 - A plan for the development, financing, and operation of the transportation facility, including, without limitation, an indication of the proposed sources of money for the development and operation of the transportation facility, the anticipated use of such money, and the anticipated schedule for the receipt of such money.
 - A list of any assumptions made by the person about the anticipated use of the transportation facility, including, without limitation, the fees that will be charged for the use of the transportation facility, and a discussion of those assumptions.
 - The identification of any risk factors identified by the person submitting the request that are associated with developing, constructing, or improving the transportation facility and the plan for addressing those risk factors.
 - The identification of any local, state, or federal resources that the person anticipates requesting for development and operation of the transportation facility, including, without limitation, an anticipated schedule for the receipt of those resources and the effect of those resources on any statewide or regional program for the improvement of transportation.
 - The identification and analysis of any costs or benefits associated with the proposed facility, performed by a professional engineer who is licensed pursuant to Chapter 625 of NRS.
- The names and addresses of the persons who may be contacted for further information concerning the request.
- Any additional material and information that the Department may request.

Application and Quantitative Evaluation Fees

A proposer is to submit a non-refundable application fee and a quantitative evaluation retainer fee using the fee schedule described in the ITUP. The evaluation retainer fee is based on the anticipated capital cost of the project. To establish the quantitative evaluation fee, the Department will:

- Conduct the qualitative screening (Step 3A).
- Estimate the Department's quantitative evaluation review cost based on its understanding of the UP to determine the appropriate quantitative evaluation fee.
- Notify the proposer of any difference in cost between the quantitative evaluation fee retainer and the quantitative evaluation fee.
- Include the quantitative evaluation fee (new amount) in the Cost Sharing Fee Agreement (included in draft form as Attachment B to the ITUP).





Execution of the <u>Cost Sharing Fee Agreement</u> will be necessary for any UP review to continue beyond the qualitative screening (Step 3A).

Proposer Communication

The Department may (at its sole discretion) offer opportunities for a proposer or interested party to discuss a potential UP prior to submittal. Such opportunity would be limited to topics submitted in writing prior to the meeting and shall remain strictly confidential. Communication with the proposer during the review of the UP, if any, will be at the sole discretion of the Department.

Changes or Updates to Submittals

Following submittal of a UP, the PAT may request a proposer correct minor deficiencies, and failure to correct such deficiencies within the time period specified by the PAT will be deemed as the proposer withdrawing its UP. If the PAT determines that the UP is materially incomplete, the PAT will notify the proposer that the UP has been rejected. If the proposer elects to revise its UP and resubmit an application, the proposer must submit an additional application fee.

If the UP is withdrawn or is rejected during the completeness review (Step 2), the PAT will:

- Notify the PPD and the PPM that the UP has been rejected with an explanation as to why.
- Notify the proposer that the proposal was rejected and return the quantitative evaluation fee.

5.2.1.2 Cost Sharing Fee Agreement

The proposer will enter into a Cost Sharing Fee Agreement with the Department prior to the Department beginning any quantitative evaluation (Step 4). This agreement defines the requirements and conditions for off-setting actual costs incurred by the Department during its evaluation. Once the agreement is executed, the Department will begin the evaluation and tracking and reporting of expenditures in accordance with the conditions of the agreement.

5.2.2 Completeness Review – Step 2

The purpose of the completeness review is to confirm that the UP contains the required information and meets statutory requirements.

5.2.2.1 Schedule and Process

The PAT will establish the time frame for the completeness review based on the PAT's workload, availability of resources, and the complexity of the UP.

The PAT will notify Accounting in writing that a UP has been received and to request that a work order be assigned to the UP. Accounting will assign a work order, by which it will track costs associated with the review of the proposal. This information will be used to determine if adjustments to the administration fee are needed in the future.





Once a work order is established, the PAT will send the submitted application fee to Accounting to be deposited. The PAT will also send the submitted quantitative evaluation retainer fee to Accounting to be held in a safe until the PAT and Accounting are notified by the PPD (or designee) that the UP has advanced to the quantitative evaluation (Step 4).

At this time, the PM, in coordination with the PAT, is to identify committee members to participate in the completeness review (as needed) and subsequent evaluation process by requesting Committee Appointment approval from the PPD. Evaluation committee members may include employees of related governmental entities, if possible and if needed.

The PAT and PM will review the UP to verify completeness using the Completeness Review Checklist, with support from members of the Project Selection Committee and technical and financial members of the PET in providing input on the level of sufficiency for the information submitted.

5.2.2.2 Results, Reporting, and Notification

The PM will convene a completeness review meeting to document a pass/fail recommendation and/or formulate a request to the proposer for additional information, if necessary. The PM will prepare a pass/fail recommendation that is submitted to the PPM for review and recommendation to the PPD.

The PPD will notify the PM, PAT, Accounting, and PPM in writing of his/her decision to advance the UP to qualitative screening (Step 3A), or to reject the UP. If the UP is rejected, the PAT will notify the proposer of this decision in writing and return the quantitative evaluation retainer fee. If advanced, the PAT will notify the proposer in writing that the Department will be moving forward into the UP qualitative screening process.

5.2.3 Qualitative Screening - Step 3A

The purpose of qualitative screening is to determine whether the proposed project has sufficient merit for consideration and has the attributes necessary for successful delivery, thereby warranting dedication of resources for further evaluation.

This step will eliminate any UP or defer further consideration if it demonstrates insufficient technical, financial, or safety benefits to the Department or is infeasible to deliver.

5.2.3.1 Schedule and Process

The first action under this Step 3A is for the PM to complete a Project Management Plan (PMP) that aligns resources needed to complete the qualitative screening and establishes the anticipated budget for review. The PM will use the same, previously established work order number from Accounting to track the evaluation cost.

5.2.3.2 Qualitative Screening Criteria

To determine a UP's merit and attributes for successful delivery, the Department may use the following criteria for qualitative screening.





Current Law Applicability

- Is the project allowed under current law or could the project be reasonably modified to fit under current law?
- Does the UP have a basis in existing federal, state, and local statute, with clear authority to: 1) deliver the project via the proposed delivery model; and/or, 2) apply the proposed funding and/or financing mechanisms?

Consistency with the Statewide Transportation Improvement Program/Regional Transportation Plan

- Is the project included in the draft or currently adopted/approved Statewide Transportation Improvement Program (STIP) or Regional Transportation Plan (RTP)?
- What actions are being taken to add the project to the STIP and/or RTP?

Environmental Impacts and Status

- Is the project environmentally cleared?
 - If not, does the proposal show environmental clearance underway and does the proposal include a complete and realistic description of the anticipated environmental impacts of the project?
- Does the proposal detail proposed avoidance, minimization, and mitigation strategy, and a realistic schedule for environmental clearance through appropriate oversight agencies?

Right-of-Way Acquisition Status

- What right-of-way (ROW) impacts are anticipated?
- What is the status of any proposed clearances and/or what is the acquisition strategy and schedule to secure the needed ROW?

Public Interest/Project Merit

- Does the project serve a public interest?
- How does the project's benefits relate to its cost?
- What are the scientific, technical, or socioeconomic merits of the proposal?

Financial Acceptability

- Is the project financially acceptable?
- Is the detailed plan of finance reliant on debt or private equity investment?
- Does the plan of finance allow the project to move forward pursuant to all applicable Department budget and finance requirements and constraints?
- Does the plan of finance demonstrate enough financial capacity to assume the responsibilities and obligations to deliver the project on schedule and budget?
- Is there an opportunity to accelerate implementation and reduce reliance on public funds?





What is the project's opportunity cost, return on investment, and rate of any such return?

Qualifications: Technical and Financial

- Is the proposer qualified to perform the work?
- What is the structure of the proposer's team?
- What is the background and experience of the proposer, individual team members, and key personnel in developing, designing, constructing, financing, operating, and/or maintaining comparable projects?
- What is the proposer's financial and past performance on similar delivery models and/or similarly sized and scoped projects to assume the responsibilities and obligations required to deliver the project on schedule and on budget?
- What information has the proposer provided as evidence of its ability to deliver the scope of work by the proposed delivery model?
- Does the proposal provide a legal, clear, and reasonable path to award and execution if a sole source agreement is requested?

5.2.3.3 Results, Reporting, and Notification

The PRT will summarize the results of the qualitative screening using the Qualitative Screening Report. This report will identify the Project Selection Committee's recommendation to reject the UP or advance it to the quantitative evaluation (Step 4). The PM will submit the Qualitative Screening Report to the PPM for review and recommendation to the PPD. Based on the PPD's review and the PPM's recommendation, the PPD may reject the UP, request additional information from the proposer, or advance the UP to the quantitative evaluation.

The PPD will notify the PM, PAT, Accounting, and PPM in writing of his/her decision to advance the UP or to reject it. If the UP is rejected, the PAT will notify the proposer of this decision in writing and return the quantitative evaluation retainer fee. If advanced, the PAT will notify the proposer in writing that the Department will deposit the quantitative evaluation retainer fee.

5.2.4 Intergovernmental Review - Step 3B

No later than 10 days after a proposer is notified of the Department's decision to advance the UP to Step 3A, the proposer must submit the following to each governmental entity that has jurisdiction within the limits of the proposed project.

- A complete copy of the UP.
- A transmittal letter copied to the Department that:
 - Informs the governmental entity of the proposed project.
 - Indicates that the Department has reviewed the proposal and requested that the proposer submit the UP to the entity.





Governmental entities impacted by the UP will also receive an Affected Agency Review Letter from the Department. This letter is to request detailed responses to specific questions that will help complete the qualitative screening (Step 3A) and quantitative evaluation (Step 4).

5.2.5 Quantitative Evaluation – Step 4

The purpose of quantitative evaluation is for the Department to complete a detailed technical, financial, legal, and risk analysis to determine if the UP is desirable and has potential for success and/or presents too much risk or inadequate benefit to the Department and the public.

This step is to also further evaluate outstanding issues or risks identified during the qualitative screening (Step 3A) and intergovernmental review (Step 3B). As part of the evaluation, the Department may initiate additional planning, travel demand, revenue, environmental, and financial analyses to better evaluate a UP's merit.

5.2.5.1 Schedule and Process

The PPM will establish the time frame for the quantitative evaluation based on the Department's workload, availability of resources, and the complexity of the UP. Once set, the PM will establish and lead the PET in conducting the evaluation. As part of this process, the PM and PET will determine if Service Providers' technical, financial, and/or legal assistance is needed to conduct this quantitative evaluation. If needed, the PM will use resources currently under contract or otherwise follow the Department's current procurement policy.

The PET will perform technical and financial due diligence to potentially include quantitative risk assessment and detailed cost estimating and financial modeling (see <u>Section 5.2.5.4</u> for more information). The PET will also respond to comments, questions, and concerns included in the Qualitative Screening Report and received from governmental entities when evaluating the UP. The PET will present this information to the Project Selection Committee and PPM, which is to be discussed during the quantitative evaluation consensus meetings.

5.2.5.2 Quantitative Evaluation Criteria

The Department may use the following criteria to further evaluate the proposal. **Note:** The following criteria generally will guide the Department's in-depth analysis during Step 4 to build upon the qualitative screening process (Step 3A).

Consistency with the Statewide Transportation Improvement Program/Regional Transportation Plan

- What is the project's ranking in the currently adopted STIP or RTP?
- If the project is not included in an adopted STIP or RTP, is the project a viable alternative to a project currently adopted in the STIP or RTP?
- If the project is not included in an adopted STIP or RTP, how does the proposal justify amending the STIP or RTP to include the project, and what impact does that have on other projects and the overall Statewide Transportation Program?





Network Continuity Considerations

- How well does the project fit within the existing and planned transportation system?
- Will the project function as an integral element of the overall network, enhancing multimodal aspects of a transportation network?
 - If not, will the project operate independently and provide public benefit in isolation, improving mobility and/or enhancing the performance, and/or viability of an adjacent facility(ies)?

Constructability

- How has the proposal evaluated and presented the ease or difficulty of constructing the project? Note: Constructability factors and risks may include potential conflicts with existing facilities or developments, constraints due to topographic features or environmental issues, problematic geotechnical conditions, the ease of facility maintenance, the likelihood of multiple construction phases that would significantly increase project costs and schedule, the presence of sufficient construction access, winter maintenance, and/or overall MOT operations during construction.
- How has the proposal addressed phasing, detours, and traffic and hauling operations during project construction?

Congestion Relief

- To what extent does the project provide congestion relief considering current and anticipated future congestion levels?
- Will the project increase or decrease congestion on an adjacent facility(ies), either by providing additional capacity or expanding modal options?
- By what specific criteria was operations analysis and conclusion drawn and what specific assumptions were applied by the proposer to arrive at the conclusion?
- How has the proposal addressed whether connectivity to the project mitigates bottlenecks or congestion on the larger system?

Potential Safety Impacts

What positive and negative traffic safety impacts will result from the project?

Social Impacts

- To what extent does the project socially impact the affected vicinity?
- What noise impacts, access impacts, disruption during construction, aesthetic impacts on adjacent property(ies), and environmental justice impacts would be caused by the project?
- Are relocations of residences and/or businesses required?
- What is the proposer's plan to mitigate all noted impacts and is the proposed mitigation adequate and feasible?

Environmental Impacts and Status

Have any previous environmental studies been conducted and, if so, what is the status of these reports?





- What physical impacts on the natural environment and other environmental impacts on adjoining properties and communities caused directly or indirectly by the project need to be mitigated?
- What remaining environmental impacts (including cultural resource impacts) need to be mitigated?
- What environmental risk is introduced by the project and what is the proposer's plan to mitigate such risks?
- Which responsibilities related to environmental coordination and mitigation will be borne by the proposer, and which, if any, are proposed to be borne by the Department?

Project Status

- Does the proposal demonstrate the "readiness" of the project in terms of initial/concept-level/preliminary engineering, environmental clearances (detailed further under "Environmental Impacts and Status" heading), utility conflicts, ROW needs, and acquisition plan?
- What is necessary to make the project "ready" for implementation?
- What ROW impacts/needs are anticipated, and what is the proposed clearance and acquisition strategy/schedule for the identified ROW?
- Does the proposal address the risks associated with the project, and who will bear these risks? What is the proposer's approach to allocate/assign risks to the party best able to manage and mitigate the risks?
- Does the proposal address how the identified risks will be avoided, mitigated, or accepted, and what are the consequences of such responses on the success of the project in terms of quality, schedule, and cost?

Financial Feasibility

- Has the proposer identified enough project funding and financing?
- Have all funding and financing sources and the amount of funding and financing expected from each source been identified?
- Has funding and financing from private entities and/or a means to better leverage public funding been proposed?
- Have potential funding shortfalls, as well as strategies for closing the shortfall, been identified?

Stakeholder and Citizenry Acceptability

- What level of support does the project have among stakeholders, elected officials, transportation officials, and the public at large?
- What issues have been raised by any opposition, and how does the proposal plan to mitigate this opposition?





What evidence of support has been included for the project, such as media coverage, letters of support and/or opposition, polling data, and/or written comments provided to the Department?

Other Area Project Impacts

What impacts will the project have on other projects, and what impacts will other projects have on this project?

Qualifications: Technical & Financial

- Does the proposal demonstrate evidence of similar alternatively delivered or similarly scoped projects?
- Does the proposal demonstrate evidence of adequate experience for proposed key personnel?
- Does the proposal demonstrate the proposer's ability to deliver the scope of work by the delivery model proposed?
- Does the proposal demonstrate adequate financial capacity and past performance on similar delivery models and/or similarly sized/scoped projects to deliver the project on schedule and on budget?
- Does the proposal demonstrate unique capabilities, related experience, facilities and/or techniques (or unique combinations of these qualities) integral to achieving short- and long-term project success?
- Is the proposal a viable candidate if a sole source contract is requested?

Long-Term Maintenance Responsibilities

- Does the proposal describe a reasonable approach to the operations and/or maintenance of the project, including relative roles and responsibilities between the Department and the proposer regarding innovation and risk sharing?
- Has the proposal accurately analyzed the project's long-term maintenance implications and adequately addressed the costs, schedule, roles, and responsibilities?
- Will the proposal provide good value for transferring the long-term maintenance responsibilities?

5.2.5.4 Department Due Diligence

As part of quantitative evaluation, the Department may perform any number of the following due diligence activities to determine accuracy and merit of a UP. Additional information related specifically to Public-Private Partnerships (P3) for each activity is provided in <u>Section 4.2.1.1</u>.

Risk Assessment

The Department may conduct a quantitative risk analysis to estimate: 1) the probability of project risk occurrences, 2) the impact of such risk if encountered, and 3) whether the project will meet its cost and schedule objectives if the risk occurs. The result of the analysis will assist in identifying mitigation and concentrating resources (e.g., staff,





process, schedule, or budget) on the most significant risks. This analysis will also aid in assigning risk (i.e., allocating risks) should the project move forward.

The Department's risk analysis may involve:

- Conducting a risk workshop.
- Developing a risk register to document identified and unknown risks, estimates of the impact of risk on the project, and associated costs.
- Utilizing information generated by these activities to carry out value-based analyses: a public-sector comparator (see below), cost-benefit analysis, and/or opportunitycost analysis.

The results of this analysis may also be used for the cost estimating and financial modeling.

Shadow Bid/Cost Estimation

The Department may develop a shadow bid using information from the UP and based on the Department's estimates of project delivery cost using the same delivery method. The shadow bid reflects cost estimates for capital improvements, Operations & Maintenance (O&M), and life cycle/major maintenance developed by the Department or the Department's Service Providers from the perspective of the private sector in a competitive procurement. The shadow bid is to replicate the anticipated project development costs for the proposer and the corresponding financial impact on the Department, as applicable.

Developing a Shadow Bid requires integration of the conceptual project schedule, risk analysis information (detailed above), project's scope of work, and an indicative financial structure that includes a combination of debt and equity (leverage), equity returns, and lender requirements and margins. Additionally, project revenues must also be incorporated if user-fees are anticipated, which may include user fee and value-capture approaches.

The cost estimation and schedule-risk analyses would involve:

- Reviewing the conceptual scope, schedule, and cost assumptions.
- Identifying contingency and separating it from baseline cost estimates.
- Assessing historical price fluctuations and developing forecasts for key project components.
- Identifying and quantifying uncertainty in baseline cost estimates for soft costs and Department costs over the project's life cycle.
- Identifying and quantifying uncertainty in the proposed schedule.

The Department may also develop escalation factors using the latest economic trends and considering local conditions when completing a shadow bid.





Public-Sector Comparator

The Department may develop a public-sector comparator to evaluate whether the UP's proposed project delivery method is the most economical solution for the public benefit and to determine if the project delivers lower life cycle costs and/or greater revenues to the Department. The public-sector comparator is the non-P3 delivery method selected by the Department as most appropriate for comparison purposes.

To determine the value of the proposed delivery method, the Department may compare anticipated costs and benefits expected from the proposed delivery method to the anticipated costs and benefits expected from the Project Selection Committee.

Public-Private Partnership Feasibility

If P3 delivery is proposed, the Department may conduct a value-for-money (VfM) analysis that compares the public-sector comparator to the shadow bid. The VfM provides the Department a structured approach to: 1) assess the VfM it can expect from the UP using P3 delivery, and 2) arrive at an indicative determination of whether the UP financial structure returns greater value when compared to other delivery methods and financial structures, as determined by the Department.

5.2.5.5 Results, Reporting, and Notification

The PET is to evaluate the UP by documenting comments and concerns and presenting findings to the Project Selection Committee and PPM during a quantitative evaluation consensus meeting(s).

The Project Selection Committee will then present these recommendation to the PPD, summarizing the results of the quantitative evaluation using the Quantitative Evaluation Report. In identifying the PRT's recommendation to reject the UP or advance it for the Department Director's review (Step 5), the report also will address comments, questions, and concerns from the previous Qualitative Screening Report and any input received from the governmental entities. As applicable, the Department may use the results of its due diligence (e.g., risk assessments, shadow bid, public-sector comparator, and/or VfM analysis) to measure the financial benefits and worthiness of the UP, including these results in the Quantitative Evaluation Report.

The PPD will evaluate the Project Selection Committee's recommendation and, if applicable, will provide additional input in writing prior to forwarding to the Department Director for review (Step 5). Should a decision be made at any time to reject the UP or request additional information from the proposer, the PM, PAT, Accounting, and PPM will be notified in writing. If the UP is rejected, the PAT will notify the proposer of this decision in writing. The Department will return any unused funds from the originally submitted quantitative evaluation fee.

5.2.6 Department Director Review – Step 5

The Department Director will review the results of the qualitative screening (Step 3A), quantitative evaluation (Step 4), and any additional input provided from the PPD to assess the merits and potential success of the UP prior to advancing the recommendation to the





Board for their consideration. The Board will be asked to take one of the following actions as part of their final recommendation regarding the UP:

- Enter a sole source negotiation to contract with the proposer.
- Advance the proposed project to a competitive procurement, soliciting competing qualifications, and ultimately proposals.
- Reject the UP.

5.2.7 FHWA Review – Step 6

If the UP has a high potential to advance via a competitive procurement or sole source negotiation and if the project will require a federal action or federal participation, the PPM will notify the PM, and the PM will follow current Department process for obtaining FHWA review and approval of a required federal action. Once FHWA approves, the process advances to Board approval (Step 7).

5.2.8 Board Action – Step 7

After completion of all previous steps, the PM and PAT are to prepare a Board Package, with support from the PET, that is to be distributed to the Attorney General's Office, the PPM, and the PPD for review and comment.

The Department Director will follow the Department's standard process for advertising the Board meeting and will submit the UP screening and evaluation results and Project Selection Committee recommendation to the Board. The Department Director will ask the Board to take one of the following actions as part of their final recommendations regarding the advancement of the UP.

5.2.8.1 Sole Source Contract

If the Board determines to proceed with entering into a sole source agreement with the proposer, the Department Director will begin sole source negotiations to contract with the proposer to enter into an agreement that delivers a project with the best value and serves the best interests of the State and the Department.

5.2.8.2 Competitive Procurement

If the Board determines that it is in the best interest of the Department to solicit competing proposals for the project, the Department Director will initiate steps to procure the project via the most appropriate delivery method as defined in these Guidelines in terms of best value and in serving the best interests of the State and the Department.

5.2.8.3 Reject Proposal

If the Board determines that it is not in the public's best interest to advance the UP, the Department Director will reject the UP.

After the Board meeting, the Department Director will notify the PPD of the Board's decision in writing. The PPD will notify the PPM, PM, Accounting, and PAT of this decision in writing. The PAT will notify the proposer with the results and a copy of the conclusions reported in the Quantitative Evaluation Report. The Department will return any unused funds from the originally submitted quantitative evaluation fee.





Section 5.3 Post Board Approval: Sole Source Negotiation

Figure 5-4 identifies the UP project delivery options that occur upon completion of the UP Identification Phase as a result of a decision by the Board. The appropriate parts of Chapter 2 (CMAR), Chapter 3 (DB), and Chapter 4 (P3) provide the details on the steps to procure, award, and administer the project via a competitive procurement and provide the general parameters to negotiate a sole source agreement in alignment with a specific delivery model.



Figure 5-4: Unsolicited Proposals Project Delivery Options – Sole Source Negotiations

5.3.1 Sole Source Negotiation

The sole source negotiation process will entail a concerted effort to engage the proposer during the development of a sole source agreement. The terms of the agreement and time necessary to complete the negotiation will vary depending on the delivery method, the complexity and details unique to each project, and the Department's other priorities.

While the sole source negotiation process for a UP can be customized to accommodate the unique project characteristics and development status, it will ultimately need to comply with the commercially reasonable risk allocations and contracting for the applicable delivery method. The time and effort necessary to complete the negotiations may depend on factors such as; the UP completeness, risk allocation, available due diligence information, and contract terms and technical requirements to support the process. As a result, the time and effort for completion of the sole source negotiation process could vary significantly between UPs.

5.3.2 Agreement Terms and Preparation

Because of the unique nature of every project and the potential for a various approaches and project delivery methods, it is anticipated that contracts may differ significantly. Using the most applicable delivery method and the most recent Department template as a starting point, the Department and proposer will look to the agreement to define the rights and obligations of the parties about the project. The Department will consider such policy or





legal, financial, and technical advice as it deems necessary or appropriate to successfully develop, structure, and negotiate the agreement(s). The Department also may seek the advice and involvement of affected state, local, or regional public entities during the negotiation process.

The proposer should be aware that any subsequent phase agreement between the Department and the proposer for the development, finance, construction, improvement, operation, and/or maintenance of a project may entail negotiating key business terms related to:

- Delay and compensation events, penalties (e.g., liquidated damages) for project delay, or other forms of noncompliance and/or implications related to force majeure events.
- Financial structure and public funding, user fee provisions, and/or revenue sharing.
- Contractor and facility performance and quality.
- Contracting and labor practices.
- Insurance, indemnity, and payment/performance security.
- Default, remedies, and grounds for termination.
- Dispute resolution.
- Governing law and federal requirements.

In the event the Department advances a UP and desires to negotiate a sole source contract, the Department will base the terms and conditions of the associated agreement on the most applicable delivery method and the most recent Department template.

Only the delivery methods provided for by NRS will be considered for a sole source agreement.

Chapter 2 (CMAR), Chapter 3 (DB), and Chapter 4 (P3) provide references and links to each delivery method's most current contract/agreement template.





APPENDICES

- Appendix A Definitions
- Appendix B List of Acronyms
- Appendix C Project Delivery Selection Approach
- Appendix D Construction Manager at Risk Activities, Milestones, and Decision Points Workflow
- Appendix E Design-Build Activities, Milestones, and Decision Points Workflow
- Appendix F Design-Build Example Risk Allocation Matrix
- Appendix G Public-Private Partnerships Activities, Milestones, and Decision Points Workflow
- Appendix H Public-Private Partnerships Advantages and Disadvantages
- Appendix I Instructions to Unsolicited Proposers
- Appendix J References



Appendix A Definitions

The definitions contained herein are provided to aid in the understanding of the Pioneer Program Guidelines and may vary in solicitation documents or Agreements.

Agreement Services: A division of the Nevada Department of Transportation (NDOT or the Department) that serves as the receiver, distributor, and coordinator of proposals. Agreement Services also performs a Completeness Review on behalf of the Department.

Application Fee: A fee that, along with the Review Fee, is paid by submitters of Unsolicited Proposals (UP) for their proposals to proceed through the review process. The fee is defined in the Instructions to Unsolicited Proposals (ITUP), may change over time, and is made payable to the Department.

Availability Payment: Periodic (typically annual) payment made the Department to a P3 Developer upon completion of a project and its availability for public use. This payment is often made in lieu of toll revenues when it is not possible or practical to charge drivers a toll to use the facility. Availability payments also can be based on the availability of facility capacity, traffic volumes, facility condition, and other operational and maintenancemilestones.

Bidder's Preference: A five percent (5%) addition to the total proposal score for a proposer who is qualified to receive a preference for bidding public works pursuant to Nevada Revised Statutes (NRS) 338.1693(3).

Bond: A debt instrument issued for a period of more than one year with the purpose of raising up front capital for a project by borrowing. The federal government, states, cities, corporations, and many other types of institutions sell bonds. Generally, a bond is a promise to repay the principal along with interest on a specified date. When an investor buys a bond, the investor becomes a creditor of the issuer. The buyer does not gain any kind of ownership rights to the issuer, as in the case of equity participants. On the other hand, a bond holder has a higher priority for claims on an issuer's income than an equity participant in the case of financial distress. Some bonds are tax-exempt, and these are typically issued by municipal, county, or state governments, whose interest payments are not subject to federal income tax, and sometimes also state or local income tax.

Capital Expenditures: Long-term expenditures for property, plant, and equipment.

Cash Flow: Cash receipts minus cash payments over a given period of time.

Categorical Exclusion: A category of actions that do not have a significant environmental effect and neither require an Environmental Assessment nor an Environmental Impact Statement.

CMAR Project Team: The entire CMAR team, which may consist of the Construction Manager, the Department's Project Manager, the Department's Design Service Provider(s),





the Independent Cost Estimator (ICE), and the Department's Construction Engineering Service Provider(s).

Commercial Close: The signing (execution) of all project-related contracts that memorialize all obligations between the parties. Any subsequent modifications to the contracts are completed via addendum.

Competitive Neutrality: The recognition that significant government business activities, which are in competition with the private sector, should not have a competitive advantage or disadvantage simply by virtue of government ownership and control. Examples of potential advantages of government ownership or control include tax exempt status, hidden project costs associated with contractor claims and third-party lawsuits, contract administration, and overhead and limits of liability.

Competitive Range: A range of scores established by the Project Administration Team (PAT) that is deemed to have a reasonable chance for the Proposer being selected for award of a project. The Competitive Range, if used, is established during the Request for Proposal (RFP) process of the Evaluation Phase for projects.

Completeness Review: A review of a UP by the PAT to ensure that the proposal contains all required information and statutory requirements.

Concession: Long-term lease agreement that involves the lease of publicly financed facilities to a private-sector entity (concessionaire) for a specified time period. Under the lease, the private-sector entity agrees to pay an upfront fee to the public agency to obtain the rights to collect the revenue generated by the facility for a defined period of time. In addition to the concession fee, the concessionaire operates and maintains the facility, which may include capital improvements.

Concessionaire: The holder of a concession or grant, especially for the use of land or commercial premises.

Consortium: All of the participants or developers associated with a specific project. In the early stage of a project, it may be a loose association not a legal or contractual entity or joint venture.

Construction Compliance Manager: Department lead who is responsible for overseeing the Department's review of the Design-Builder's or P3 Developer's construction submittals to confirm compliance with the contract documents.

Construction Contract: A contract primarily related to the Construction Manager at Risk (CMAR) delivery method between the Construction Manager and the Department providing for the construction of a project, or any portion thereof. A Construction Contract may be entered into in accordance with NRS Chapter 338 and the Pre-Construction Services Agreement.

Construction Manager: The proposer selected pursuant to the CMAR procurement process and awarded the Pre-Construction Services Agreement to provide CMAR services for a project.





Construction Manager at Risk (CMAR): A project delivery method that involves a general contractor acting as a construction manager (Construction Manager) in the Pre-Construction/Design and Construction Phases of a project.

Construction Compliance Manager: Department lead who is responsible for overseeing the Department's review of the Design-Builder's or P3 Developer's construction submittals to confirm compliance with the contract documents.

Contract Compliance Manager: Department lead who is responsible for confirming the DB team's compliance with the contract documents.

Cost Sharing Fee Agreement: An agreement between the Department and a proposer that contains the specific terms and conditions related to the use and sharing of fees for the evaluation of an Unsolicited Proposal.

Contingencies: Existing conditions, situations, or circumstances which involve uncertainty, and which could result in gains or losses. For example, guaranteed loans represent contingent liabilities which, in the event of default by the borrowers, the federal government would be liable to cover the losses of the guarantors, and thereby sustain the loss itself.

Default: When a covenant has been broken or an adverse event has occurred. A monetary default occurs when a repayment is not made on time. Other defaults may include failure to meet a project parameter, milestone or other contractual obligation, such as insurance and bonding requirements.

Department: The Nevada Department of Transportation (NDOT).

Design-Bid-Build (DBB): The traditional, public-sector project delivery method where design and construction are separately procured in sequential steps for project development. One contract is bid for the Design Phase, and then a second contract is bid for the Construction Phase of the project.

Design-Build (DB): A project delivery method whereby a single entity (a contractor with subconsultants, or team of contractors and engineers, often with subconsultants) leads both the Design Phase and Construction Phase of a project. The Department confirms compliance to the contract documents under this delivery method.

Design Compliance Manager: Department lead who is responsible for overseeing the Department's review of the Design-Builder's or P3 Developer's design submittals to confirm compliance with the contract documents.

Developer Financing: A type of financing where a private party finances the construction or expansion of a public facility in exchange for operational and revenue right or for purposes of advancing the development of a private enterprise such as residential housing, commercial stores, and/or industrial facilities. This type of financing may take the form of capacity credits, impact fees, or exactions.





Deviation: Any change, deviation, modification, or alteration from the technical provisions, including standards referenced in the technical provisions. For purposes of this definition, "Deviation" includes design exceptions.

Due Diligence: A thorough assessment of the transaction which covers critical (e.g., financial, legal, technical, and insurance) aspects of the project in order to ensure that there are no undisclosed or potential problems.

Equity: Commitment of money from public or private sources for project financing with an anticipated rate of return pay-out.

Evaluation Panel: A panel comprised of at least three members, at least two of which have experience in the construction industry, representing the Department and, as determined by the Department, in its sole discretion, other local agencies or industry representatives that will support preparation of the RFP and associated evaluation criteria, evaluate CMAR proposals, conduct and evaluate CMAR proposer interviews, and recommends the final ranking to the Selection Official.

Final Handback Acceptance: A certification that releases the concessionaire from the P3 Contract and final payment.

Financial Close: The date on which all project contracts and financing documentation are signed and conditions precedent to initial drawing of the debt have been satisfied or waived.

Financial Proposal: One of two main components, along with the technical proposal, of a P3 proposal that contains both a financial plan and a financial model for a project.

Governmental Entities: The agencies identified by statute to receive notification of the receipt of an Unsolicited Proposal by the Department (NRS 239.005).

Guaranteed Maximum Price (GMP): The guarantee of the pricing submitted by the Construction Manager. Whether these prices are lump sum or quantity based, the price is guaranteed not to be exceeded in construction of the project, or a portion thereof, in accordance with the requirements of the construction documents and the Construction Contract.

Guarantor: A party who agrees to guarantee repayment or performance.

Handback: The terms, conditions, requirements, and procedures governing the condition in which Concessionaire is to deliver the project and project ROW to the Department upon expiration or earlier termination of the agreement. Such requirements may be set forth in the technical requirements of the agreement.

Handback Reserve Account: A reserve account required as security for the obligation of the P3 Developer to transfer the project back in the agreed condition, with each element meeting the relevant residual life requirement. The handback reserve account is to remain funded with the handback reserve amount, which generally equals the amount necessary to ensure the project meets the handback requirements at the end of the term. Deposits into this account are typically required to be made quarterly.




Independent Cost Estimator (ICE): A team or individual that provides independent cost estimating development services for projects. An ICE is to complete independent cost estimates with contractor-style (production-based) methodologies and estimating software. The term is primarily used for the CMAR delivery method.

Industry Review Meeting: A meeting between the Department and proposers to exchange information regarding key elements of a proposed project.

Innovative Contracting (also refer to Alternative Contracting or Alternative Project Delivery): Practices meant to improve the efficiency and quality of roadway construction, maintenance, or operation. Examples of what is considered innovative contracting include A+B contracting, lane rental, the use of warranties, CMAR, DB, Design-Build-Operate, and Design-Build-Finance-Operate-Maintain (DBFOM).

Instructions to Unsolicited Proposers (ITUP): The instructions available to proposers that describes how to complete an application for an Unsolicited Proposal, including the fee, submittal requirements, forms, evaluation criteria, and other relevant information of the Unsolicited Proposal.

Life Cycle Costs: The costs of a project over its entire life, from project inception to the end of a transportation facility's design life.

Net Present Value: Amount by which the total present value of cash inflows, net of ongoing costs for operations, maintenance, repair, reserve funds, and taxes and discounted at the cost of capital over the period of the contract exceed the project's capital cost outlay.

Nevada Transportation Board: Final authority for the Department that approves and ratifies all projects and contracts per NRS and Board policy as part of the Pioneer Program.

Notice of Award: Written notice of the Department's award to the selected firm of the Department's award of an agreement or contract.

Notice of Intent to Award: Written notice of the Department's intent to award an agreement or contract to a proposer or bidder. Award is contingent on successful negotiations and/or Board approval.

Notice to Proceed (NTP): Written notice to the selected firm to proceed with the work specified in the applicable agreement or contract.

Opinion of Probable Construction Cost (OPCC): The estimated construction cost prepared by the Construction Manager at established milestones during the Pre-Construction Phase for each item of work to construct the project. The term is primarily used for the CMAR delivery method.

Pioneer Program: A program that represents a concerted effort by the Department to focus on identifying alternative funding sources and alternative project delivery methods.

Pioneer Program Director (PPD): The Deputy Director/Chief Engineer of the Department who oversees the development and implementation of the Pioneer Program, reporting all program and project activities to the Department Director.





Pioneer Program Manager (PPM): The Department's Project Management Chief serves as the Pioneer Program Manager under the direction of the Pioneer Program Director.

Pre-Construction Services Agreement (PCSA): An agreement between the Construction Manager and the Department to provide CMAR-related services for a project's pre-construction phase.

Present Value (PV): The value of future cash flows discounted to the present at certain interest rate (such as the entity's cost of capital or funds), assuming compounded interest.

Price Proposal: A component of a DB or P3proposal that contains the price for performing project duties. The price proposal is evaluated along with the technical proposal to determine overall proposal scores that are used to select the preferred proposer for a project.

Private Activity Bonds: Tax-exempt bonds issued by or on behalf of a local or state government for the purpose of providing special financing benefits for qualified projects.

Private-Sector Developer (P3 Developer): A person, entity, or organization that is not the federal government, a State, or a political subdivision of the State and that proposes to enter into an agreement with the state to participate in any or all portions of the design, development, construction, improvement, expansion, extension, delivery, operation, maintenance, or financing of a project eligible under the Pioneer Program.

Project Administration Team (PAT): A team that is responsible for ensuring a timely progress of evaluations, coordinating any consensus meeting(s) or re-evaluations, and ensuring appropriate records of the evaluation are maintained. The PAT will also serve as a point of contact in the event that a team member has questions or encounters issues relative to the evaluations.

Project Identification Process: The process by which all candidate Pioneer Program Projects are evaluated and proceed.

Project Management Team (PMT): A team that is responsible for administering, implementing, and maintaining the integrity of the entire project procurement process, including the Request for Qualifications (RFQ), RFP, evaluations, negotiations, and selections.

Project Manager (PM): The person who is selected by the Department's Project Management Chief to establish and lead a project from delivery method selection through the project procurement process and implementation/contract administration of the contract as applicable.

Project Review Team (PRT): A qualifications and/or proposal review team detailed in Section 3.2.1 (for DB projects) and Section 5.5.1 (for Unsolicited Proposals).

Project Team (Team): Generally comprised of Department technical staff and assembled and led by the PM once a project has been approved for Pioneer Program Delivery. Composition, roles, and responsibilities of project teams may vary for a given delivery method and are defined under each project delivery method.





Proposal: A written submission to the Department satisfying the requirements of a Letter of Interest (LOI), RFQ, RFP, or another specific request by the Department for qualifications or information from a proposer/contractor with regards to a project.

Proposal Selection Committee (PSC): Review committee established by the PM to lead the evaluation of the proposal in accordance with the RFP Evaluation and Selection Plan. The term is primarily used for the DB and P3 proposal process.

Proposer: A person, business entity, a consortium of business entities, or a public-sector entity that submits a proposal for review and evaluation under these rules, whether the proposal was solicited or unsolicited by the Department.

Public-Private Partnership (P3): A contractual agreement formed between public- and private-sector partners, which allows more private sector participation than is traditional. These agreements usually involve a government agency contracting with a private company to renovate, construct, operate, maintain, and/or manage a facility or system. While the public sector usually retains ownership of the facility or system, the private party is often given additional decision rights in determining how the project or task will be completed most cost effectively. P3 defines an expansive set of relationships from relatively simple contracts (e.g., A+B contracting), to development agreements that can be very complicated and technical (e.g., DBFOM). In the context of these guidelines, the term "public-private partnership" is used for any scenario under which the private sector would be more of a partner than they are under the traditional method of procurement.

Public-Sector Comparator: A comparator that represents the most efficient public procurement cost (including all capital and operating costs and share of overheads) after adjustments for Competitive Neutrality, Retained Risk and Transferrable Risk to achieve the required service delivery outcomes. This benchmark is used as the baseline for assessing the potential value for money of private party bids in projects. **Qualifications Evaluation Team (QET):** Review committee established by the PM to assist the QSC during the evaluation of the Statement of Qualifications (SOQ) in accordance with the RFQ Evaluation and Selection Plan. The term is primarily used for the DB and P3 proposal process.

Qualitative Screening: A screening process used by the Project Selection Committee to review a specific Unsolicited Proposal using the Qualitative Screening Criteria to determine whether the project has the potential to be successful and therefore merits further evaluation.

Qualifications Selection Committee (QSC): Review committee established by the PM to lead the evaluation of the SOQs in accordance with the RFQ Evaluation and Selection Plan. The term is primarily used for the DB and P3 proposal process. **Quantitative Evaluation:** A detailed examination by the Project Selection Committee of a specific Unsolicited Proposal using the Quantitative Evaluation Criteria that focuses on issues identified in the Qualitative Evaluation Report and Intergovernmental Review.

Quantitative Evaluation Fee: A fee established to offset the Department's expenses in conducting the quantitative evaluation for a specific Unsolicited Proposal. The fee is initially used as a retainer based on the proposed project's anticipated capital cost and then later adjusted based on the actual cost.





Quantitative Risk Analysis: A numeric estimate of the overall effect of risk on the project objectives, such as cost and schedule. The results provide insight into the likelihood of project success and are used to develop contingency or risk reserves.

Reference Information Documents: Support or background information related to and provided to proposers during the procurement phase, including at a minimum basic configuration or layout of the project, existing geotechnical information, existing memorandums of understanding between the Department and other agencies or municipalities, existing studies, and other information regarding liability and risk assignment.

Reserve Account: A separate cash account used to meet future payment obligations such as debt service, maintenance, or capital expenditure.

Revenues: All rates, rents, fees, assessments, charges, and other receipts derived by a project sponsor from a project.

Selection Official: The Department Director or Deputy Director (as designated) who is responsible for either accepting or rejecting the recommendation of the applicable evaluation committee or panel concerning evaluation results. For DB/P3 projects, the Selection Official may also issue a request for a Best and Final Offer (BAFO) after reviewing the proposals. Once the Selection Official accepts a proposal, he/she may move the process forward for FHWA concurrence and ratification by the Board, as applicable.

Special Experimental Project Number 14 (SEP-14): Allows state transportation and local transportation agencies using federal-aid funds to apply for permission to use a variety of alternative procurement approaches to deliver projects.

Special Experimental Project Number 15 (SEP-15): Allows state and local transportation agencies using federal-aid funds to apply for permission to use alternative approaches to transportation planning, financing, contracting, environmental clearance, and right-of-way (ROW) acquisition that may be more efficient than traditional approaches.

Shadow Bid: An estimate of the life-cycle cost of a project using a P3 delivery approach, which attempts to predict the bidder's costs, financing structure, and other factors in a competitive bidding environment.

State: The government of the State of Nevada, including all agencies, organizations, boards, commissions, elected, or appointed officials, who are empowered to act on behalf of the State of Nevada.

State Infrastructure Bank (SIB): A state or multi-state revolving fund that provides loans, credit enhancement, and other forms of financial assistance to surface transportation projects.

Statewide Transportation Improvement Program (STIP): A short-term transportation planning document covering at least a three-year period and updated at least every two years. The STIP includes a priority list of projects to be carried out in each of the three years. Projects included in the STIP must be consistent with the long-term transportation plan, must conform to regional air quality implementation plans, and must be financially constrained (achievable within existing or reasonably anticipated funding sources).





Technical Evaluation Committee (TEC): Review committee established by the PM to lead assist the PSC during the evaluation of the proposal in accordance with the RFP Evaluation and Selection Plan. The term is primarily used for the DB and P3 proposal process.

Technical Proposal: One of two main components, along with the financial/price proposal, of a DB or P3 proposal that describes the proposer's technical delivery approach for a project. The scope could include such things as design elements and approach, construction approach, maintenance approach, project management approach, schedule, phasing, and quality control and assurance approach

Technical Provisions: The specifications contained in DB and P3 procurement documents to which the project must be designed, built, maintained, operated, and handed back, as appropriate. The Technical Provisions may be performance-based and/or prescriptive specifications.

Transportation Infrastructure Finance and Innovation Act (TIFIA): A United States Department of Transportation (USDOT) program that provides credit assistance for qualified regional and national surface transportation projects.

Unsolicited Proposal (UP): A submittal by an entity that conforms to the statutory authority and regulations with respect to a project that has not been initiated by the Department.

User Fees: Direct payment for a service provided, which can include, but is not limited to tolls, fees, charges, tariffs, etc.

Value Engineering Change Proposal (VECP): A proposal that is submitted to the Department by a DB/P3 team when the team identifies a change to a project that could result in a cost savings to the Department. The purpose is to encourage the use of the Design-Builder's ingenuity and experience in arriving at alternative designs, methods, and procedures, which result in a lower-cost approach to accomplish a prescribed function.

Value for Money: The estimated project cost savings associated with using a P3 delivery approach compared to a public-sector comparator. **Value for Money (VfM) Analysis:** VfM is the tool to identify the appropriate delivery method through a structured approach to estimating a dollar value associated with P3 project delivery as compared to a public-sector comparator.





Appendix B List of Acronyms

Acronym	Meaning
ATC	Alternative Technical Concept
BAFO	Best and Final Offer
BVS	Best-Value Selection
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMAR	Construction Manager at Risk
D&C	Design and Construction
DB	Design-Build
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
DBFOM	Design-Build-Finance-Operate-Maintain
DMV	Department of Motor Vehicles
DPS	Department of Public Safety
DRT	Dispute Resolution Team
E&S	Evaluation and Selection
EDMS	Electronic Document Management System
EEO	Equal Employment Opportunity
EPD	Escrow Proposal Document
FHWA	Federal Highway Administration
FMIS	Financial Management Information System
GMP	Guaranteed Maximum Price
ICE	Independent Cost Estimator
ITP	Instructions to Proposers
ITS	Intelligent Transportation System
ITUP	Instructions to Unsolicited Proposers
LOI	Letter of Interest
MAP	Maximum Availability Payment
MAP-21	Moving Ahead for Progress in the 21 st Century
MOT	Maintenance of Traffic
NAC	Nevada Administrative Code
NDOT	Nevada Department of Transportation
NEPA	National Environmental Policy Act
NRS	Nevada Revised Statutes
NTP	Notice to Proceed
OPCC	Opinion of Probable Construction Cost
O&M	Operations & Maintenance
P3	Public-Private Partnership
PAB	Private Activity Bond





Acronym	Meaning
PAT	Project Administrative Team
PCSA	Pre-Construction Services Agreement
PDSA	Project Delivery Selection Approach
PDSC	Project Delivery Selection Committee
PET	Proposal Evaluation Team
PM	Project Manager
PMP	Project Management Plan
PMT	Project Management Team
PPC	Price Proposal Committee
PPD	Pioneer Program Director
PPM	Pioneer Program Manager
PRT	Project Review Team
PSR	Project Scoping Report
PSC	Proposal Selection Committee
PV	Present Value
QA/QC	Quality Assurance/Quality Control
QBS	Qualification-Based Selection
QET	Qualifications Evaluation Team
QMP	Quality Management Plan
QSC	Qualifications Selection Committee
RFI	Request for Information
RID	Reference Information Document
RFP	Request for Proposals
RFQ	Request for Qualifications
RLOI	Request for Letters of Interest
ROW	Right-of-Way
RTP	Regional Transportation Plan
SEP-14	Special Experimental Projects No. 14
SEP-15	Special Experimental Projects No. 15
SIB	State Infrastructure Bank
SOQ	Statement of Qualifications
STIP	Statewide Transportation Improvement Program
TEC	Technical Evaluation Committee
TIFIA	Transportation Infrastructure Finance & Innovation Act
TP	Technical Provisions
UP	Unsolicited Proposal
USDOT	United States Department of Transportation
VE	Value Engineering
VECP	Value Engineering Change Proposals
VfM	Value for Money





Appendix C

Project Delivery Selection Approach



Appendix C: Project Delivery Selection Approach Page-1





Nevada Department of Transportation (NDOT) Project Delivery Selection Approach (PDSA)

Overview

This Project Delivery Selection Approach (PDSA) provides a process to assist the Nevada Department of Transportation (NDOT or the Department) in their selection of an appropriate project delivery method. The PDSA includes generic forms and questions for use by Department staff, the Project Manager, and the Project Delivery Selection Committee (PDSC). Every PDSC member must be generally familiar with the alternative contracting delivery methods discussed herein, the overview of these delivery methods provided below, and the applicable reference links attached. By applying the PDSA, the PDSC can arrive at a recommended project delivery method for each project evaluated. However, the Project Manager and Pioneer Program Manager are responsible for filling out the PDSA and the *Project Delivery Method Recommendation* Form. This recommendation will be forwarded to the Pioneer Program Director and the Department Director for a final determination on a delivery method.

The primary objectives of this document are to:

- Present a structured approach to assist Department staff in making project delivery method recommendations.
- Assist the Department in determining if there is a dominant or obvious choice of project delivery method for the project being evaluated.
- Provide a project delivery method recommendation based on a consensus opinion by the PDSC.

Background

Currently, there are three types of project delivery methods available for publicly funded transportation projects in Nevada. The two most common are the Design-Bid-Build (DBB) and the Design-Build (DB), with the Construction Manager at Risk (CMAR) method now considered for evaluation. The following paragraphs only briefly describe each delivery method. For a more complete description, see Section 1.4 of the Pioneer Program Guidelines and the attached reference links.

- DBB is the traditional project delivery method in which an agency designs a project and awards a construction contract to the lowest bidder based on the agency's completed construction documents. The agency "owns" the details of design during construction and the risk associated with any changed conditions, unknowns, errors, or omissions that are encountered during construction.
- DB is a project delivery method in which the agency contracts a single entity to complete design and construction of a project. Characteristically, a project is



approximately 25 to 30 percent designed with a well-defined scope and knowledge of project risks at the point invitations to bid are requested via a value-based procurement. The design-builder retains the risks associated with design, quantities, constructability, etc. normally retained by the agency, resulting in greater cost and schedule certainty.

CMAR is a project delivery method by which the agency leads a coordinated team, which works to develop design and construction documents in a manner to minimize overall project risk, improve project delivery schedule, and apply potential innovation to meet or exceed project goals. The other two members of the team, the designer and contractor, individually and independently are contracted and directly are accountable to the agency. Characteristically, a project is approximately 5 to 10 percent designed with a partially defined scope and vague knowledge and definition of associated risk when invitations to participate on the project's pre-construction team are released. The procurement of the contractor is done through qualifications and/or value-based selection for pre-construction and construction services. The contractor is obtained early in the design phase, allowing for the contractor to offer expertise with regard to the schedule, budget, constructability, as well as the identification, evaluation, and mitigation of risk. Upon final design of the project, or a portion thereof, the agency will ask the contractor to submit a fixed-price bid. The agency and the contractor may negotiate reassignment of risk if the agency finds the bid too high. If the parties cannot agree on a price, the agency may release the project for bid using the DBB method. The contractor may enter into a fixed-price contract with the agency based on a reasonable final cost and time of construction (agreeable to the agency) to complete the project. This method allows the agency to control the development of scope, understand and allocate project risk, encourage the use of new construction techniques, and phase project delivery to reduce overall delivery costs and schedule.

It should be noted that one can use different methods on the same project, and the objective is to recommend the best delivery method for the project. Each project delivery method is distinguished by how risk is managed and how the project's scope, schedule, and budget are managed. Each of the delivery methods poses both overlapping and unique advantages as well as associated disadvantages in their use. Each project must be evaluated individually, taking into consideration project goals, prioritization of project goals as each relates to the Department's overall mission, and the attributes of each delivery method in meeting or exceeding a project's goals.



Step-by-Step Project Delivery Selection Approach

The PDSC should use their professional judgment when recommending the most appropriate delivery method. This PDSA provides a systematic approach to understanding the delivery options; defining project goals, challenges, and opportunities; evaluating potential delivery methods; compiling the results in descending preference; and, lastly, recommending the appropriate delivery method for the project.



Step 1 is for the Project Manager, with assistance from the Project Management Team (PMT) (defined below) and other Department staff as necessary, to research and understand the various elements of the project. The following is a list of representative information that the Project Manager must consider in order to provide the PDSC the necessary information to appropriately apply the PDSA. The checklist is not exhaustive, and certain elements might not be known at the time of evaluation. Other items can be added if they influence the project delivery decision, and relevant information can be appended.

- 1) Project Name
- 2) Project Location
- 3) Project Sponsor
 - a. Local
 - b. State
 - c. Federal
- 4) Project Description
 - a. Purpose and Need
- 5) Estimated Project Cost Range (Total)
- 6) Budget Availability (Yr. and Qtr.)
- 7) On State Transportation Improvement Program (STIP)? (Fiscal Year)
- 8) NEPA Status
- 9) Right-of-Way (ROW) Status
- 10) Desired Project Delivery Date (Yr. and Qtr.): Start of construction and substantial completion of construction
 - a. Established by what entity?
 - b. For what purpose?
- 11) Funding Source(s): Local, State, FHWA, etc.
- 12) Project Corridor
 - a. Corridor Plans
 - b. Adjacent Projects (status of existing and future projects [3 to 5 years])
- 13) Major Project Features: Pavement, bridge, sound barriers, etc.
- 14) Schedule Milestones: Milestones could include start of construction, end of construction, deliverables, etc.
- 15) Stakeholders
 - a. Third Party
 - b. Regulatory Agencies
 - c. Utility
 - d. Railroad
 - e. General Public
 - f. Other Governmental Interest
- 16) Major Challenges
 - a. With ROW, Utilities, Environmental Approvals, Permits, and Clearances
 - b. During Construction Phase





- c. Specialty Items or Constructability Issues
- 17) Sources of Risk
 - a. Design Risk by Discipline: Potential risk related to Utility, Structure, ROW Acquisition, Environmental Commitments, Definition of Scope, etc.
 - b. Construction Risk: Potential risk for Geotechnical, Dewatering, Material Sources, Maintenance of Traffic (MOT), Environmental Constraints, Long-Lead Items, Utilities, etc.
- 18) Potential for Innovation
- 19) Availability of Department Resources to Support Delivery Schedule
- 20) Prior Project Work (including design) and Project Status



Given that the understanding of the project is completed (Step 1), Step 2 is for the Project Manager, with assistance from the PMT and the Department staff as necessary and input from the Pioneer Program Director and other significant stakeholders as necessary, to clearly define and agree on measurable project goals, challenges, and opportunities in which the PDSC will use to appropriately apply the PDSA.

Typically, the project goals can be defined in five to 10 items. Examples are provided in Appendix B. The PDSC is to consult the Project Manager, the Deputy Director (as applicable), and other significant stakeholders to assist in understanding and developing the project goals. These goals are intended to remain consistent over the life of the project.

Project Goals (Enter the project-specific goals as follows):

The Department's goals for the Project are to (in no particular order of importance):

- A) Improve mobility and safety in the Project area for local and highway traffic by:
 - a. Reducing or eliminating eastbound backups approaching the eastbound exit to I-580,
 - Improving the weaving movement between Wells Avenue and the I-80/I-580 east to south ramp and between the I-80/I-580 interchange and 2nd Street/Glendale Avenue, and
 - c. Enhancing traffic operations for 2nd Street/Glendale Avenue and Mill Street;
- B) Minimize disruption during construction work (e.g., minimize the number and durations of lane closures) for local and highway traffic and emergency service providers, specifically along mainline I-580 and approaching the I-80/I-580 east to south ramp;
- C) Limit impacts to (e.g., access, noise) and enhance features (e.g., aesthetics) for local businesses, residents, schools, and the Reno-Sparks Indian Colony (RSIC);
- D) Limit disruption and travel delays to and from schools near the Project area;
- E) Proactively manage stormwater and water quality during both the construction phase and as integrated into the ultimate improvements, especially in and around the Truckee River;
- F) Obtain the best value for the costs required to design and construct the Project through a competitive procurement;
- G) Strategically schedule the Project's construction phase in order to maximize workdays within a typical construction season for Northern Nevada;
- H) Provide a safe Project for workers and the traveling public; and
- I) Provide a high-quality, aesthetically-pleasing, durable, and maintainable facility.



Once the Project Manager has defined the project goals, it is critical to define elements of the project that would create the greatest challenges and opportunities related to achieving these project goals. Below are examples of various elements one might consider.

Opportunities	Challenges
What opportunities enhance achieving	What challenges hinder achieving project
project goals?	goals?
 Innovations to reduce maintenance of traffic impacts Improve water quality Enhance safety Minimize disruption to surrounding community (emergency service providers and business, school, and resident access) during construction Improvements to aesthetics Minimal ROW acquisition needs Possible innovative in cost-effective structure design/implementation and associated foundation design and construction Limited SHPO coordination needed because of work being done on the larger environmental project Politically supported both at the state and local levels 	 ROW timing risks; potential ROW acquisition delays Potential environmental issues with previous landfill acquisition RSIC coordination to continue the good relationship when the design-builder is brought on Railroad coordination (incl. schedule and agreements) Working in and around the Truckee River (e.g., permits and BMPs) Lack of definition for aesthetic improvements Airport coordination around potential access changes to the direct connect ramps from SB I-580 to NB I-580 Weather, seasonal construction windows limiting work MOT, notably first responder access Community impacts (incl. residents, schools, businesses) Construction labor availability

Do these elements constitute a good description of the issues of complexity or risks associated with delivery of the project? Yes: \Box No: \Box

If no, the Project Manager should reevaluate the project goals and the project opportunities and challenges until they represent a good description of the issues of complexity or risks associated with delivery of the project.

End Result: The Project Manager will have an understanding of the project goals and a clear definition of challenges, opportunities, issues of complexity, and associated risks that can be communicated to the PDSC to appropriately apply the PDSA.



Step 3 is for the PDSC to evaluate the appropriateness of each delivery method to the project. NDOT and the Federal Highway Administration (FHWA) have identified five criteria for determining the appropriateness of applying an alternative delivery method. These criteria are:

- 1. Cost Impacts
- 2. Schedule Impacts
- 3. Opportunity to Manage Risk
- 4. Complexity of Design and Construction Phasing
- 5. Opportunity for Innovation

This tool provides a list of typical advantages and disadvantages associated with each delivery method that are to be considered when evaluating a delivery method's appropriateness for the specific project. This list of advantages and disadvantages is not exhaustive, and the PDSC will supplement additional characteristics, when appropriate, that further describe the advantages and disadvantages of the delivery method from their knowledge of the method and their professional judgment.

Based on their understanding of the delivery method's advantages and disadvantages as well as the Project's goals, challenges, opportunities, risks, and complexities, the PDSC will form a consensus opinion of the most appropriate delivery method for each of the five criteria, and then summarize the key issues considered in arriving at this opinion.

For each of the five criteria, the PDSC should consider the preferred delivery method in descending order by circling the "green," "yellow," or "orange" markers. **Note:** Each delivery method must be rated by one of the three colors under each criterion, and each color may only be used once under each criterion.





Criterion 1: Cost Impacts

Overview: This criterion considers aspects of project cost and must be evaluated with respect to previously defined budget goals of the project, e.g., the ability of a given delivery method to handle budget restrictions, identify early and precise cost estimates, and control of all project costs, not just construction. In other words, this criterion assesses the abilities of each delivery method in terms of cost estimating and project budget control.

Delivery Method	Potential Advantages	Potential Disadvantages	Preference (Circle One)
DBB	 NDOT is assured the lowest price of the bid package because of competitive bidding. 	 NDOT may experience less cost certainty from change orders stemming from errors, omissions, and unknowns. Once the bid is open, NDOT may incur costs associated with any changes. 	
DB	 NDOT may benefit from documentation of a fair price due to competitive bidding. NDOT may benefit from cost certainty at the award of construction (e.g., no or limited change orders) due to the contractor's ownership or increased knowledge of project risks. NDOT may benefit from cost certainty because the contractor accepts the risks associated with design, quantities, constructability, etc. NDOT may benefit from Alternative Technical Concepts (ATC) from losing Proposers who received a stipend. 	 NDOT may experience an increase in cost for transfer of risk to the contractor. NDOT may not receive full cost savings for contractor innovation. NDOT pays for RFP development by multiple contractors. NDOT pays for contractor involvement in design work. NDOT experiences increased internal costs for staff to administer procurement and support the design phase. 	
CMAR	 NDOT may benefit from cost certainty at the award of construction (e.g., no or limited change orders) due to the contractor's ownership or increased knowledge of project risks. NDOT may reduce overall project costs from avoidance, allocation, or mitigation of a project's risks during design development. NDOT may reduce overall project costs from contractor input on constructability, cost saving innovations, and value engineering input. NDOT may make better quality design solutions with contractor input on cost. 	 NDOT pays for contractor involvement in design work. NDOT is not assured of receiving the lowest price without competitive bidding. NDOT experiences increased internal costs for staff to administer procurement and support the design phase. 	

Summary of key issues justifying the above opinion:

Summary of key issues justifying the above opinion:

Note: Each delivery method must be rated by one of the three colors, and a color may only be used

- Most appropriate - Neutral - + Least Appropriate

once.



Criterion 2: Schedule Impacts

Overview: This criterion considers aspects of project schedule including the ability to shorten the schedule and the opportunity to control and prevent time growth. In other words, this criterion addresses the abilities of each delivery method in terms of schedule compression and control.

Delivery Method	Potential Advantages	Potential Disadvantages	Preference (Circle One)
DBB	 NDOT can expect a higher probability of completing construction on schedule because third-party agreements (e.g., ROW acquisition, utilities, railroads) are normally completed prior to construction beginning. 	 NDOT may experience a delay in project completion stemming from time extensions to resolve errors, omissions, and unknowns in construction. NDOT may have a delay in schedule due to the awarding of an under-qualified, low-bid contractor. NDOT may experience schedule delay because the DBB process is normally sequential with few options to accelerate delivery. 	
DB	 NDOT can expect a higher probability of completing construction on schedule because the contractor accepts the schedule risks associated with design, quantities, constructability, etc. NDOT may benefit from the potential for a shortened project delivery due to parallel design and construction activity. 	 NDOT may have to allot considerable time and staff effort for the preparation and evaluation of the RFQ and RFP as well as during the design phase. 	• •
CMAR	 NDOT may be able to compress the schedule through an early start and the shortening of the amount of time between design and construction (e.g., early procurement of long lead items, utility relocation, earthwork, etc.). NDOT may be take advantage of an innovative approach to maintenance of traffic, reducing delay to the travelling public. 	 NDOT may experience an increase in schedule due to the time needed to agree on price or, in the extreme case in the absence of an agreement, requiring advertising for competitive bids. NDOT may have to allot considerable time and staff effort for the preparation and evaluation of the RFP as well as during the pre-construction phase. 	

Summary of key issues justifying the above opinion:





Criterion 3: Opportunity to Manage Risk

Overview: Every project has some level of risk during various phases of its project development, and each delivery method handles risks differently in their ability to identify, quantify, and mitigate risks. The most effective approach to manage and allocate risks is to assign project risks to the parties in the best position to manage them.

Delivery Method	Potential Advantages	Potential Disadvantages	Preference (Circle One)
DBB	• NDOT has the ability to mitigate risks that they may be positioned best to manage (e.g., third party utilities and ROW acquisitions), reducing potential risks and offering more project certainty.	 NDOT may experience more change orders because they own risks associated with design, quantities, constructability, etc. NDOT is in the position of managing risk during construction, which is the most expensive time to resolve issues. 	• • •
DB	 NDOT may experience fewer change orders because the contractor owns the risks associated with design, quantities, constructability, etc. NDOT is able to relinquish risks better managed by the contractor because the contractor's design and approach are tailored to the contractor's abilities. 	 NDOT may experience fewer bidders because of an increase in proposal costs. NDOT may inappropriately relinquish risk to the contractor that NDOT is more capable of managing, causing a negative impact to schedule, cost, or the public. NDOT may experience less innovation as the contractor may not introduce new construction methods or techniques to avoid taking on risk. 	
CMAR	 NDOT may reduce project risks resulting in improvements to schedule, cost, safety, quality, and public impacts because of contractor input during development of design. NDOT may reduce the risk of design rework and project unknowns (e.g., reduce ROW impacts and acquisitions and identify utilities before construction). 	 NDOT is least able to manage the risk of the public's and industry's perception of cost reasonableness. NDOT is least able to manage the risk of the public's and industry's perception of a CMAR selection. 	

Summary of key issues justifying the above opinion:

Note: Each delivery method must be rated by one of the three colors, and a color may only be used

once.



Criterion 4: Complexity of Design and Construction Phasing

Overview: This criterion considers aspects of a project that are unique or more complex than normally encountered. The factors may be associated with the unique project scope, goals, and objectives specified by the Department. Complexity may occur in the uniqueness of design, MOT, phasing of the project, constructability, location of the project, unknowns, etc.

Delivery Method	Potential Advantages	Potential Advantages Potential Disadvantages		
DBB	 NDOT has more time to develop design solutions. 	 NDOT would not gain constructability value from a contractor until after award, thereby potentially losing the benefit of cost savings. NDOT could experience a limitation for potential innovative constructability concepts. NDOT may incur a higher number of change orders from an inexperienced, low-bid contractor. 	• • •	
DB	 NDOT can transfer risk that could be better managed by the contractor, potentially improving constructability and reducing errors and change orders. NDOT gains the benefit of innovative ideas being integrated early in the design process. 	 NDOT has less control of the design and implementation. NDOT may incur unexpected project results due to the difficulty in scoping the unique issues and complexities of a project. 	• • •	
CMAR	 NDOT gains the benefit of innovative ideas being integrated early in the design process. NDOT may potentially reduce and mitigate project complexity through design, thereby gaining more certainty to cost, quality, and schedule delivery and construction. 	 NDOT may be in an undesirable negotiating position having to retain the contractor for subsequent construction project phases. 		

Summary of key issues justifying the above opinion:

Note: Each delivery method must be rated by one of the three colors, and a color may only be used once.

=-Most·appropriate 🔿 = ·Neutral · 🛑 = ·Least·Appropriate¶



Criterion 5: Opportunity for Innovation

Overview: This criterion considers the opportunity for encouraging and integrating innovation for new designs, products, technologies, project approaches, and construction techniques to achieve the project's goals.

Delivery Method	Potential Advantages	Potential Disadvantages	Preference (Circle One)	
DBB	 NDOT can select innovation independent of the contractor's experience or abilities. NDOT may gain greater buy-in of the agency for the implementation of innovation ideas given the agency's control of the value engineering process. NDOT has more time to explore and integrate opportunities for innovation. 	 NDOT may be limited to integrate innovations by using a low-bid contractor instead of a contractor selected on qualifications. NDOT may incur cost and/or schedule impacts from introduction of NDOT- derived innovations that may not be constructible. NDOT may have to dedicate additional resources to approve and confirm the success of innovative concepts. 	• • •	
DB	 NDOT gains the benefit of contractor- derived innovative ideas being introduced early in the design process. 	 NDOT may not experience the full opportunity to innovate because innovation may be limited by contractor abilities, comfort, and time constraints to prepare an RFP. NDOT may not realize savings from innovations because the saving usually accrues to the contractor. 		
CMAR	 NDOT can encourage innovation because risk is better identified and communicated. NDOT can reduce the constraints related to the contractor's abilities, level of comfort with innovative concepts, or time constraints, providing for increased opportunities for innovation. NDOT can benefit from contractor participation in helping to mitigate potential risk through the introduction of new technologies or innovative delivery. 	 NDOT may experience difficulty in negotiating the guaranteed maximum price due to inherent unknowns associated with the introduction of new innovative concepts. 		

Summary of key issues justifying the above opinion:





Step 4a involves the color coding of each criterion cell based on the colors assigned in Step 3. An example of a completed table is provided.

Step 4a	Criterion	DBB	DB	CMAR
	Criterion 1: Cost Impacts			
	Criterion 2: Schedule Impacts			
	Criterion 3: Opportunity to Manage Risk			
	Criterion 4: Complexity of Design and Construction Phasing			
	Criterion 5: Opportunity for Innovation			

Step 4b is where the Project Manager and the PDSC summarize the delivery method preference. The PDSC will indicate (with a green, yellow, and orange color coding) the initial recommended delivery method for the project under evaluation. The initial recommended delivery method will be identified as green in a table similar to the example below, which shows that the CMAR delivery method is the initial recommended delivery method for the evaluated project.

Step

Recommended Delivery Method			
DBB	DB	CMAR	

Step 4c is involves considering the viability of P3 delivery. Once an Initial Project Delivery Method Recommendation is complete the following questions must be answered:

- 1. Is the project located in a Clark County? Yes:
 No:
 No:
- 2. Is Design Build the Initial Project Delivery Method Recommendation? Yes: No:

If the answer to both questions is yes, the Project Manager and PDSC will evaluate whether the project displays characteristics that are conducive to P3 delivery in accordance with Section 4.2 of the Pioneer Program Guidelines.

If the answer to either question is no, the Project Manager and Pioneer Program Manager will advance the Initial Project Delivery Method Recommendation using the attached *Project Delivery Method Recommendation* Form to provide a delivery method recommendation to the Pioneer Program Director and Department Director for the project. When determining this



recommendation, the Pioneer Program Manager will also consider factors such as programlevel considerations, the number of projects to be delivered under a given method at a given time, the capacity of Department staffing to support project procurement and execution, FHWA input, current market conditions, and other factors. The Pioneer Program Director and Department Director will review the recommendation to make a final decision on a delivery method.

Additional instructions are included in Section 1.4 of the Pioneer Program Guidelines.



For NDOT guidelines, see the most recent Pioneer Program Guidelines.

For the approved FHWA SEP-14 application, see: <u>http://www.fhwa.dot.gov/programadmin/contracts/sep14nv2011.pdf</u>

For further material concerning various project delivery methods, see the Transportation Research Board's *Evaluation of Project Delivery Methods* at: <u>http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_webdoc_41.pdf</u>



The following project goals are examples for reference when defining and documenting goals specific to a project.

General Project Goals

Schedule:

- Minimize project delivery time on a phase or the entire project in a desire to reach guaranteed maximum price in six months.
- Reach substantial completion by (month, year).

Cost:

- Minimize project cost.
- Maximize project budget.
- Complete the project on budget.

Quality:

- Meet or exceed maintenance of traffic requirements.
 - Maintain x lanes of traffic in each direction at all times during construction except for bridge replacements as noted below.
 - Limit road shut down to one consecutive 72-hour period through the duration of project.
- Provide the lowest life-cycle costs.

Note: Goals should be consistent with environmental documents when applicable.

DB-oriented Project Goals

Schedule Issues:

- Substantial Completion (Final Acceptance) by (date/event)
- Substantial Completion (Final Acceptance) within _____ days of Notice to Proceed

Cost/Financial:

- Cost not to exceed \$_____
- Maintenance costs not to exceed \$_____
- Payment to the service provider to be paid over _____ years
- Borrowing cost not to exceed ____%



Quality/Innovation:

- Design life of ____ years
- Warranty of ____ years
- Minimize disruption to residents, businesses, and the traveling public during construction
- Provide aesthetic solution to minimize visual impact

Scope:

- Available funding to build _____
- Available funding to build _____ lane miles

Risk Allocation:

• Shift ____ risks to Design-Builder

CMAR-oriented Project Goals

- Minimize conflict of the work effort with the adjacent contractor, while achieving seamless construction from the vantage point of the public between the Department's Project and the RTC's Moana Lane Widening Project.
- Minimize delays and impacts to the traveling public, local residents, and local businesses, while maintaining pedestrian movement at all times during construction.
- Establish open, timely, and accurate communication and coordination with the public and the Project stakeholders through the Department.
- Reach a fair and reasonable Construction GMP in order to award a Construction Contract on October 8, 2012 or earlier so as to achieve seamless construction from the vantage point of the public between this Project and the RTC's Moana Lane Widening Project.
- Achieve the Project schedule of completing work within one (1) concurrent construction season and achieve substantial completion no later than July 1, 2013.
- Build a professional and collaborative Project Team.
- Strive to achieve zero (0) change orders on the Project.



Project Delivery Method Recommendation Form

Project Name: _____

Ste

Step 4a	Criterion			DBB	DB	CMAR	
	Criterion 1: Cost Impacts						
	Criterion	2: Schedu	ule Impacts	;			
	Criterion	3: Opport	unity to Ma				
	Criterion Construc	4: Complection Phas	exity of Des ing				
	Criterion	5: Opport	unity for In				
	=-M	ost∙appropr	iate⊖·=·N	eutral· 🔴 =·L	.east Appro	opriate¶	
Step	Recommended Delivery Method			4b			
	DBB	DB	CMAR				
			1	1			

Step 4c (if applicable)

1. Is the project appropriate for P3 Delivery? Yes: No:

If this step is applicable, the Project Manager and PDSC will summarize P3 Feasibility findings and attach the appropriate supporting documentation.

Summary of key issues justifying the above opinion:

Appendix D

Construction Manager at Risk Activities, Milestones, and Decision Points Workflow











Appendix E

Design-Build Activities, Milestones, and Decision Points Workflow







Appendix F Design-Build Example Risk Allocation Matrix

Example Project – Design Build Risk Allocation	NDOT	Design- Builder	Shared
Right-of-Way			
Parcels to be Acquired by Owner (including Owner-related acquisition delays)	x		
Additional Parcels Required by DB Changes (including additional property costs and delays)		х	
Railroad ROW / Access			Х
Design			
Use of Alternative Technical Concepts (ATCs)		Х	
Deviations from Contract Documents		Х	
Design Defects		Х	
Accuracy of Reference Documents (including Schematic / Reference Design)		х	
Design Review / Owner and Third Parties – Delays or Changes			X
Design-Builder Proposal – Extent to Which it is Binding		Х	
Basic Configuration Change	X		
Utilities			
Accuracy of Department-Supplied Information: a. Identified Utilities b. Misidentified / Unidentified Utilities	x		
Master Utility Agreements / Individual Agreements			Х
Utility Betterments/Enhancements		Х	
Advance Utility Adjustments	X		
Utility Owner's Failure to Cooperate (under separate contract)		Х	
Utility Owners – Delays			Х
Reimbursements from and Payments to Utility Owners		Х	
Sufficiency of ROW for Utility Adjustments / Acquiring Utility Easements (Unless due to DB changes)	x		
Change in Relocation Requirements Due to Department Design or Scope Changes	x		
Incidental Utility Work		Х	
Governmental Approvals / Permits			
Environmental Clearance	X		
Environmental Permitting			Х
PUC Approval(s) / Authorization			Х
Delays in Approvals			X
Department-Provided Approvals – Changes	X		
New Approvals – Responsibility for Obtaining/Changing			Х
Offsite Mitigation – Added sites by DB		Х	
3 rd Party Approvals			
Railroads – Design Review		Х	





Example Project – Design Build Risk Allocation	NDOT	Design- Builder	Shared
Others			Х
Hazardous Material	•	•	
Known / Identified as of Proposal Date		Х	
Unknown Pre-Existing Hazardous Materials – Compensation and Relief	Х		
Occurring During Design and Construction: 1. Releases by Design-Builder 2. Releases by Owner 3. Releases by Others	x	x x	
Governmental Approvals re: Hazmat		Х	
Force Majeure			
Force Majeure – Relief, Compensation	X		
Construction		<u> </u>	
Owner / FHWA – Reviewers / Oversite / Approvals	X		
Incorrect Control Survey Data		Х	
Owner-Directed Changes	Х		
Traffic Management		Х	
Closures Due to Project	7	Х	
Coordination with Other Contractors in the Area or on the Project			Х
Property Damage / Third-Party Injury / Site Security / Risk of Loss		Х	
Non-Conforming Work		Х	
Maintenance of Improvements During Construction / Maintenance of Existing Improvements in Project ROW		Х	
Community / Business Impacts (loss of convenience, access and visibility, dust, vibration, noise, pedestrian safety, night work)		Х	
Completion Deadlines		Х	
Change in Law or Standard			
Change in Law	X		
Changes in Standards	Х		
Warranties			
General Warranties		Х	
Plant Establishment / Site Stabilization		Х	





Appendix G

Public-Private Partnerships Activities, Milestones, and Decision Points Workflow








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Appendix H
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Public-Private Partnerships Advantages and Disadvantages





Potential Advantages	Potential Disadvantages		
COST IMPACTS : This criterion considers aspects of project cost and VfM c previously defined budget goals and financing options for the project (e.g., the early and precise cost estimates, and control of all project costs including life construction. In other words, this criterion assesses the abilities of each delive fees (if applicable) and project budget control.	ompared to other delivery options and must be evaluated with respect to ne ability of a given delivery method to handle budget restrictions, identify ecycle costs by including Operations and Maintenance [O&M]) and not just very method in terms of cost estimating revenue potential through transit		
 P3 Developer financing lowers up-front capital costs. Any fees collected (transit projects only) would lower funding needs from traditional funding sources. Avoids inflation of project costs due to delays until NDOT can fund and/or finance the project. Avoids higher lifecycle costs due to combining O&M with Design & Construction (D&C). Project design, construction, finance, operations, and maintenance, as applicable, has greater cost and schedule certainty. NDOT may benefit from ATCs of the winning bidder and from losing proposers who receive a stipend. 	 Costs of a P3 procurement and design phase are greater than for DBB. Best value selection for the costs and risks transferred may not result in the lowest up-front project cost when compared to DBB. NDOT may not receive full cost savings for P3 Developer innovation due to the typical equal sharing of savings provided for in the P3 agreement. NDOT pays a stipend for proposals responding to RFPs by multiple P3 Developers. NDOT pays for P3 Developers involvement in design work. The number of P3 Developers pursuing projects in the U.S. is limited, resulting in more difficulty maintaining robust competition. 		
SCHEDULE IMPACTS: This criterion considers aspects of project schedule including the ability to shorten the schedule and the opportunity to control and prevent time growth. In other words, this criterion addresses the abilities of each delivery method in terms of schedule compression and control.			
 Project acceleration compared to only using traditional funding and financing. Construction can begin prior to the final design being completed for the entire project, which results in a faster project delivery. 	 NDOT may have to allot considerable time and staff effort for the preparation and evaluation of the RFQ and RFP, as well as during the design phase. 		
OPPORTUNITY TO MANAGE RISK : Every project has some level of risk d handles risks differently in their ability to identify, quantify, and mitigate risks project risks to the parties in the best position to manage them.	uring various phases of its project development, and each delivery method . The more effective approach to manage and allocate risks is to assign		
 If the project is technically complex or not within the expertise of NDOT, transferring the risk may bring good value to NDOT. If the project includes revenue risk, it may make sense to transfer the risk to the P3 Developer. Project design, construction, finance, operations, and maintenance, as applicable, has greater cost and schedule certainty. One entity, the P3 Developer team, is responsible for delivery of the entire project. 	 NDOT may experience fewer bidders because of an increase in proposal costs. NDOT may inappropriately relinquish risk to the P3 Developer that NDOT is more capable of managing, causing a negative impact to schedule, cost, or the public. NDOT may experience less innovation as the P3 Developer may not introduce new construction methods or techniques to avoid taking on risk. 		





Potential Advantages	Potential Disadvantages
COMPLEXITY OF DESIGN AND CONSTRUCTION PHASING : This criteric normally encountered. The factors may be associated with the unique project may occur in the uniqueness of design, maintenance of traffic, phasing of the	on considers aspects of a project that are unique or more complex than ct scope, goals, and objectives specified by the Department. Complexity e project, constructability, location of the project, unknowns, etc.
 The more complex the design and construction phasing, the better left to a P3 Developer provided they are adequately rewarded and penalized for success/failure through the P3 agreement. NDOT can transfer risk that could be better managed by the P3 Developer, potentially improving constructability, reducing errors, and change orders through performance based technical requirements. NDOT gains the benefit of innovative construction, operations, and maintenance ideas being integrated early in the design process. 	 NDOT has less control over the final design and implementation. Special attention is needed up-front to performance-based technical requirements that will focus on the condition of the asset during the operations and maintenance phase in order to maintain the desired risk allocation. NDOT may incur unexpected project results due to the difficulty in scoping the unique issues and complexities of a project.
OPPORTUNITY FOR INNOVATION:	
 NDOT gains the benefit of P3 Developer-derived innovative ideas being introduced early in the design phase. The D&C and O&M contractors of the P3 Developer team participate in the design phase, which improves constructability, reduces errors, and encourages innovation. The performance-based technical requirements incentivize the private sector to optimize innovation and value in the design, construction, operations, and maintenance to improve the lifecycle costs and quality of the project. 	 NDOT may not experience the full opportunity to innovate because innovation may be limited by P3 Developer abilities, comfort, and time constraints to prepare a response to an RFP. NDOT may not realize savings from innovations during the term of the P3 agreement because the savings usually accrue to the P3 Developer due to the typical equal sharing of savings provided for in the P3 agreement.





Appendix I

Instructions to Unsolicited Proposers





INSTRUCTIONS TO UNSOLICITED PROPOSERS (ITUP)

Attachments

Attachment A – Submission Requirements

Attachment B – Cost Sharing Fee Agreement

Attachment C – Forms

Form A – Proposer's Organization Information

Form B – Declaration to Abide By Form

Form C – Categorical Exclusions Checklist

Form D – Proposal Pricing Form

Form D-1 – Capital Improvement – Proposal Price Breakdown

Form D-2 – O&M Proposal Schedule & Price

Form D-2.1 - Routing Operations and Maintenance - Proposal Price Breakdown

Form D-2.2 – Lifecycle Maintenance – Proposal Price Breakdown

Nevada Revised Statute (NRS) Sections 408.5471 through 408.549 grants the Nevada Department of Transportation (Department) the authority to accept and evaluate an Unsolicited Proposal (UP) for transportation facility improvements. As permitted under NRS 408.5475, the Department requires a detailed, comprehensive proposal that commits to provide a specific scope of work for a certain value to the Department and the State of Nevada.

The following Instructions to Unsolicited Proposers (ITUP) describes the general procedures, form or agreements, UP forms, and other submittal requirements necessary to submit a compliant and complete UP to the Department. Additional information can be found in Chapter 5 of the Department's *Pioneer Program Guidelines*

Section 1 – Time Period, Submittal Requirements, Filing Instructions, and Review Schedule

Time Period: A proposer can submit an UP for a qualifying project at any time.

Submittal Requirements: An UP shall contain, at a minimum, the information described in <u>Attachment A - Submission Requirements</u>, along with all related forms listed in Attachment C. While the ITUP is meant to generally describe the necessary requirements for a compliant and complete UP submittal, the Department may request other information it deems necessary to comply with NRS and to deliver a project that is in the best interest of the public.

The Department will only consider proposals for further screening and evaluation that comply with the requirements of this ITUP and contain sufficient information for a meaningful evaluation. If information is missing, the Department may request such information from the proposer or may reject (in its sole discretion) an UP as incomplete.

Filing: A proposer shall deliver five (5) bound hard copies and five (5) flash drives of the UP in a sealed box(es) to the Department at the following address:

Nevada Department of Transportation - Pioneer Program Administrative Services Division 1263 South Stewart Street, Room 102 Carson City, NV 89712

The Department reserves the right to request additional copies as necessary to complete its review.

If there is a conflict between the hard and electronic copies of the proposal, the Department (in its sole discretion) shall determine which version shall control and take precedence.

Schedule for UP Review: While the size and scope of the proposed project and the level of detail included in the UP will impact the Department's review, the Department's completeness review (Step 2A in the UP identification phase described in Chapter 5 of the *Pioneer Program Guidelines*) and the qualitative screening (Step 3A) will take a minimum of two months, and the quantitative evaluation (Step 4) will take approximately four to six months.

Section 2 – Administration Fee

To initiate the Department's review and evaluation of an UP, the proposer is to provide two certified checks (together comprising the "Administration Fee") as part of its UP submittal. However, should the evaluation costs exceed the Administrative Fee, fee adjustments will be made as described herein.

The Department will track its expenses associated with the evaluation process.

The first check for \$5,000 is a non-refundable application fee the Department will use to cover expenses associated with its completeness review (Step 2A) and qualitative screening (Step 3A) of the UP.

The second check will be used as a retainer to offset portions of the Department's expenses in conducting the quantitative evaluation. The proposer is to use the following schedule (Table 1) to determine the appropriate amount for the quantitative evaluation fee retainer based on the proposed project's anticipated capital cost described in the UP.

Estimated Capital Cost	<u>Quantitative</u> Evaluation Fee Retainer
<\$50 Million	\$ 20,000
\$50 Million up to \$100 Million	\$ 35,000
\$100 Million up to \$250 Million	\$ 60,000
\$250 Million up to \$500 Million	\$ 85,000
\$500 Million up to \$1 Billion	\$110,000
>\$1 Billion	\$135,000

Table 1: Quantitative Evaluation Fee Retainer Schedule

If the Department determines that the proposal is not complete or lacks merit for the quantitative evaluation, the Department will return the second check to the proposer.

If the UP passes as complete and with sufficient merit to move to the quantitative evaluation (Step 4) the Department will:

- 1. Deposit the quantitative evaluation fee retainer (second check).
- 2. Estimate the quantitative evaluation review cost based on a better understanding of the UP, current resources, and prices to determine the quantitative evaluation fee.
- 3. Notify the proposer of any difference in cost between the quantitative evaluation fee retainer and the quantitative evaluation fee.
- 4. Include the quantitative evaluation fee (new amount) in the Cost Sharing Fee Agreement.

Proceed with the quantitative evaluation once the Cost Sharing Fee Agreement is executed. If the actual cost of the Department's quantitative evaluation (Step 4) exceeds the quantitative evaluation fee, the Department and the proposer will equally share in the Department's costs

that are in excess of the quantitative evaluation fee. If the proposer does not elect to cover the additional costs, the Department will terminate the UP review/evaluation process and reject the proposal. The Cost Sharing Fee Agreement in Attachment B contains the specific terms and conditions related to the use and sharing of fees.

If the actual cost of the Department's quantitative evaluation is less than the quantitative evaluation fee the Department will refund any excess fees not used in the quantitative evaluation.

The proposer shall submit the Administration Fee in the form of two certified checks from a bank authorized to do business in the State of Nevada, and both checks shall be made payable to the "Nevada Department of Transportation". At the time of submitting its UP, the proposer shall submit the Administration Fee in two clearly marked, separately sealed envelopes. Failure to include the Administration Fee shall result in the UP being returned to the proposer.

The Department reserves the right to change the amount of the Administrative Fee, at any time, in its sole discretion.

Section 3 – Executive Summary

The UP shall contain an executive summary, five (5) pages or less, generally describing the proposed project, including the project location and the anticipated benefit to the State, regional, and local transportation networks.

The executive summary shall identify the proposer. If the proposer is a consortium, joint venture, or partnership, the executive summary shall identify each member of the consortium, joint venture, or partnership.

The executive summary shall also identify any engineering firms, legal advisors, financial advisors, operators, and any other significant consultants or contractors involved in the UP.

If the UP advances to the quantitative evaluation (Step 4), the Department may publish the executive summary on its website.

Section 4 – Completeness Review (Step 2A)

Upon receipt of an UP, the Department will initially conduct a completeness review (Step 2A) subject to the requirements set forth in NRS Sections 408.5471 through 408.549 and the Department's *Pioneer Program Guidelines*. In connection with this review, the Department will deposit the \$5,000 application fee.

The Department may request additional information or clarifications from a proposer during its completeness review (or at any other time during the evaluation process). Failure of the proposer to provide the requested information within the specified time may be deemed as the proposer withdrawing the UP. Should this occur during the completeness review (or at any time prior to the quantitative evaluation), the Department will return the quantitative evaluation fee retainer to the proposer, with the Department retaining the \$5,000 application fee.

Section 5 – Qualitative Screening (Step 3A)

If the UP is deemed complete, the Department will conduct a qualitative screening (Step 3A) to determine if the proposal merits advancing to a detailed evaluation. The screening will consider the potential impacts of the UP with respect to statewide and regional planning, environmental, right-of-way, financial acceptability, and the technical and financial qualifications of the proposer team.

Section 6 – Quantitative Evaluation (Step 4)

The purpose of quantitative evaluation (Step 4) is for the Department to further evaluate an UP through a detailed technical, financial, legal, and risk analysis. The Department will evaluate the UP for public benefit and risk, network continuity and congestion relief, social impacts, public acceptance, and financial feasibility.

Section 7 – Proposal Changes, Proposer Withdrawal, UP Validity Period

Once submitted, any changes to the UP (other than to correct minor deficiencies as described in Section 4 of this ITUP) will require the submittal of a new \$5,000 application fee to accompany the resubmittal of the proposal.

A proposer may withdraw its UP at any time by means of a written request to the Department. Such written request shall be delivered to the address listed in Section 1 of this ITUP. A withdrawal will not limit a proposer from resubmitting a new or revised UP, provided that the proposer reapplies with a new Administrative Fee.

The UP, in its entirety, shall be valid for a minimum period of one hundred eighty (180) calendar days from the submittal date. The proposer may elect, in its sole discretion, to extend the validity of its proposal beyond the 180-calendar day period set forth above.

Section 8 – Acceptance/Rejection

The Department may (in its sole discretion) reject a UP at any time and for any reason. Such decision shall be final.

Section 9 – Procedure Changes

The Department reserves the right (in its sole discretion) to streamline, modify, and/or shorten a process by omitting or combining steps and/or may modify the procedures described in this ITUP from time to time.

ATTACHMENT A SUBMISSION REQUIREMENTS (GENERAL, TECHNICAL, AND FINANCIAL)

Instructions: The proposer is to address all of the items listed in the following table; however, the proposer has the option to address these items in whatever order it deems necessary in presenting a compelling UP and to expedite the Department's review and evaluation of the information.

The proposer shall submit its UP without reservations, qualifications, conditions, or assumptions set forth therein. The Department will review, evaluate, and interpret the UP based on the level of commitment provided by the proposer. Tentative commitments will be given limited to no consideration. For example, phrases such as "we may" or "we are considering" will be given limited to no consideration process since they do not indicate a firm commitment (phrases such as "we will" or "we shall" will be taken by the Department to indicate a firm commitment).

All correspondence regarding the UP or presented in the UP is to be in the English language. If any original documents required for the proposal are in any other language, the proposer shall provide a certified English translation, which shall take precedence in the event of conflict with the original language.

For each item listed "completeness" of the UP will be based on the detailed submittal requirements and the criteria included in the *Pioneer Program Guidelines* that are applicable to each element of the UP (including the method of delivery) at NDOT's sole discretion.

Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments
1	A topographic map indicating the location of the transportation facility.	Prepare a topographic map in accordance with the Department's surveying and mapping requirements (Special Instructions for Location Consultants). Refer to the Department's design manuals if the topo is applied to the design topo. The map shall include the project and interconnections with other transportation facilities. The scale of the map shall be legible when printed at 1" = 100'.	408.5475 2. (a)
2	A description of the transportation facility, including, without limitation, the conceptual design of the transportation facility and all proposed	Provide a conceptual design and narrative description for the overall project and each element of the project. Include a description of interconnections with other transportation facilities, environmental impacts, conflicts with topographic features and utilities, and traffic and design elements.	408.5475 2. (b)

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
	interconnections with other transportation facilities.	 At a minimum, provide the following: General roadway information, including project limits, design speeds, lane widths, shoulder widths, horizontal clearances, and all locations where a design exception would be necessary. Horizontal alignments and bearing of all control lines. Planimetrics at a concept level, such as traffic barriers, changes in control of access, Department and utility maintenance access, sidewalks, driveways, and edge of pavement. 		
		 Vertical alignments, including existing ground profiles that include vertical clearance and grades. Typical sections, including ROW limit and environmentally sensitive areas if there could be potential impacts, existing ground, pavement cross slope, shoulder widths, roadside ditches and slope ratios for fill and cuts. Limits of pavement construction work, including the improvement section as described in the UP. 		
3a	The projected total cost of the transportation facility over its life and the proposed date for the development of or the commencement of the construction of, or improvements to, the transportation facility.	 Identify the delivery method/approach proposed for the project (e.g., DB, DBF, DBFOM, CMAR or P3 etc.) and provide a brief narrative explaining why the proposed delivery method is appropriate for the project and in the best interest of the Department and the public. 1. Complete all price forms detailed in this ITUP. Develop project costs in accordance with industry standards. 2. Include a narrative and the back-up data and assumptions used to develop the pricing for each of the items listed on Form D-1 (<i>Capital Improvement – Proposal Price Breakdown</i>), D-2.1 (<i>Routing Operations and Maintenance – Proposal Price Breakdown</i>). 3. Identify and discuss the specific responsibilities for maintenance during and after construction. 	408.5475 2. (c)	

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
3b	The estimated cost of the transportation facility is reasonable in relation to similar transportation facilities, as determined by an analysis of the cost performed by a professional engineer who is licensed pursuant to chapter 625 of NRS.	Include the signature of the Registered Engineer who performed the analysis of the cost detailed on Form D (<i>Proposal Pricing Form</i>). Include a copy of the Registered Engineer's license.	408.5483 1. (c)	
4a	 A statement setting forth the method by which the person submitting the request proposes to secure all property interests required for the transportation facility. The statement must include, without limitation: (1) The names and addresses, if known, of the current owners of any property needed for the transportation facility; (2) The nature of the property interests to be acquired; and (3) Any property that the person submitting the request proposes that the Department condemn. 	 Depict existing property boundaries on mapping, design plans, and section views provided at locations with potential impacts to adjacent property. Summarize the potential impacts to adjacent property (including names and addresses) and the nature of the property interests as described in the title report. Provide other vesting documents as appropriate. Provide drawings to support the descriptions and estimated areas of property impact and to confirm that there is no impact in locations where there may be a risk of potential impacts. Identify the interests to be acquired and any property that the person submitting the request proposes that the Department condemn. Describe the plan to maintain business and property access during and after construction. Identify and discuss risks and commitments to mitigate these risks to avoid negative impacts along the corridor as a part of the project. 	408.5475 2 (d)	
4b	ROW cost and schedule risk	Include all cost and schedule risk impacts associated with any ROW acquisition that must be undertaken for the project and the exposure to this cost and schedule risk to be assumed by the proposer and the Department.		

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
4c	Telecommunication accommodations	Provide plans for accommodating access to rights-of-way for statewide telecommunications in accordance with NRS 408.5501 through 408.55029 (i.e., SB 53).		
5	The proposed interconnections between the transportation facility and existing transportation facilities and the plans of the person submitting the request for the operation of the transportation facility are reasonable and compatible with any statewide or regional program for the improvement of transportation and with the transportation plans of any other governmental entity in the jurisdiction of which any portion of the transportation facility will be located;	 Provide mapping to clearly define the project limits with a project description that matches the project description and funding described in the current STIP. (Include the current STIP documentation.) Provide mapping to clearly define the project limits with a project description that is consistent with the project description in the current RTP. If the project is not included in the current RTP and/or STIP, describe: a. Why it should be considered as a higher priority than the projects currently listed in these documents. b. Demonstrate that the detailed benefit-cost analysis (described further in item 8) results in a positive value that will compete with other projects of similar size and complexity, and c. Provide the detailed benefit-cost ratio backup data, assumptions, and supporting documentation. Include private resources that significantly increase the project benefits to offset available public funding. Include letters of support from the affected agencies that will be involved in making the change to the STIP. 	408.5483 1. (b)	

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
6	A list of all permits and approvals required for the development or construction of or improvement to the transportation facility from local, state or federal agencies and a projected schedule for obtaining those permits and approvals.	 Provide a list of all permits and approval that may be required for the project. For each permit listed, identify the risks and mitigation strategy for securing the respective permit. Include permit activities in the CPM schedule and the applicable cost estimates. Provide a detailed CPM schedule with milestones for the completion of major activities and deliverables and a clearly defined critical path. Include notice to proceed, planning, environmental, permitting, design, right-of-way, utility, start and completion of construction, operation and maintenance, and other activities and milestones described herein. Provide a narrative summary of the CPM schedule with an explanation of the contingencies included to address project risks, approvals, and agency review periods. 	408.5475 2. (f)	
7	A list of the facilities of any utility or existing transportation facility that will be crossed by the transportation facility and a statement of the plans of the person submitting the request to accommodate such crossings.	 Provide a list of the utility and transportation facilities that may cross or conflict with the project. Include a narrative summary describing the proposer's plan to accommodate each facility. Show the approximate location of each facility on the mapping design and right-of-way plans. Include the risks and mitigation strategies for each facility in the summary discussion and clearly identify and include each facility in the cost estimates and CPM schedule. 	408.5475 2. (g)	
8	 A statement setting forth the general plans of the person submitting the request for financing and operating the transportation facility, which must include, without limitation: (1) A plan for the development, financing and operation of the transportation facility, including, without limitation, an indication of the proposed sources of money for the development and 	 Include a plan of finance with a summary of the benefits and costs, including any private resources, offsets to public funds, etc., as applicable. As part of this plan: Describe in detail the proposed project funding and financing plan. Show that funding the project through fees and/or multi-year availability payments made by the Department is better than conventional use of the Department's bonding capacity. Show that the private operations and maintenance costs are lower than NDOT's cost for state-performed maintenance 	408.5475 2. (h)	

Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments
 operation facility such scheel mone (2) A list the puse of including fees for use of and a assure (3) The infractory submassion constitutions for a constitution for a construction for	ation of the transportation ty, the anticipated use of money and the anticipated dule for the receipt of such ey; of any assumptions made by berson about the anticipated of the transportation facility, ding, without limitation, the that will be charged for the of the transportation facility, a discussion of those mptions; identification of any risk rs identified by the person hitting the request that are ciated with developing, tructing or improving the sportation facility and the plan ddressing those risk factors; identification of any local, or federal resources that the on anticipates requesting for lopment and operation of the sportation facility, including, but limitation, an anticipated dule for the receipt of those urces on any statewide or onal program for the ovement of transportation; dentification and analysis of s or benefits associated with osed facility, performed by a	 Show that the use of PABs and equity financing would be less expensive based on the interest rates and return on equity secured by project revenues than the interest paid on traditional Department-debt secured by the Department or State revenues. Include a benefit-cost ratio calculation and supporting documentation that are consistent with what is required to gain approval for federally funded projects. Include the signature of the Registered Engineer who performed the analysis. Include a copy of the Registered Engineer's license. Summarize the project risks and associated risk factors by providing a risk matrix and discussion for mitigating each project risk as further described within these requirements. Describe each agency resource requested or necessary for the project and include the specific cost of resources in the estimates, financial plan and schedule information. 	

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
	professional engineer who is licensed pursuant to chapter 625 of NRS.			
9	The names and addresses of the persons who may be contacted for further information concerning the request.	Complete Form A (<i>Proposer's Organization Information</i>).	408.5475 2. (i)	
10	Any additional material and information that the Department may request.	Unless otherwise noted through an NRS reference, the following (items 11-36 of this table) are additional information requirements to be submitted as part of the UP.	408.5475 2. (j) and/or NAC 408.676	
11	Applicable proposer team experience must demonstrate relevant qualifications of the firms. Acceptance of the qualifications will be at the sole discretion of the Department.	The equity participants and proposer with 10 years of experience working together and having completed at least two projects in a similar role as identified in the UP for at least the same dollar value as the UP will be looked on as positive by the Department.		
12	Applicable key personnel resumes must demonstrate high qualifications that will support the delivery of the UP. Acceptance of the qualifications will be at the sole discretion of the Department.	 Key personnel resumes (as applicable) detailing the following qualification and experience from projects with similar size and complexity to the project will be looked on as positive by the Department. <i>Key Personnel Qualifications could include:</i> The Project Manager having 10 years of experience managing highway infrastructure projects of similar size and complexity. If the Project Manager shall designate a single point of contact with the authority to make decisions on behalf of proposer. The Construction Manager having 10 years of experience managing highway infrastructure projects of similar size and complexity. The Construction Manager having 10 years of experience managing highway infrastructure projects of similar size and complexity. The Lead Engineer being a Nevada Registered Professional Engineer, with 10 years of experience managing the design of highway infrastructure projects of similar size and complexity. The Quality Manager having experience in a similar role on a highway project of similar size and complexity. 		

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
Item No.	Requirement	 Detailed Submittal Requirements The Environmental Compliance Manager having experience in a similar role on a highway project of similar size and complexity. The Safety Manager having significant demonstrated experience in a work zone safety technician or supervisor capacity on highway construction projects of similar size and complexity to the UP, with 10 years of progressive heavy construction experience, five (5) years of which must be safety management experience. The Finance Lead with five projects that demonstrate the experience of the individual and any external financial advisor(s) with developing and implementing a plan of finance for P3 projects that have a value of at least \$400 million. The Responsible Engineer(s) being a Registered Professional Engineer(s) with 10 years of demonstrated expertise in freeway or highway design of projects similar in scope and complexity. The Design Quality Manager (DQM) being a Registered Professional Engineer in civil engineering having experience in a similar role on a freeway or highway project of similar scope and complexity. The Construction Quality Manager (CQM) having experience in a similar role on a successful project of similar scope and complexity. 	NRS Reference or Comments	
		recent demonstrated expertise in bridge construction, including experience with deep foundations (if deep		
		toundations are proposed). The Structures Construction Manager shall have demonstrated construction experience		
		with all proposed bridge types contained within the UP.		
		12. The Lead Geotechnical Engineer being a Nevada Registered Professional Engineer with 10 years of experience		
		managing the geotechnical design of highway infrastructure		
		projects of similar size and complexity.		

	Address All Items Listed			
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
		13. The Traffic Control Supervisor having certification as a Work Zone Safety Supervisor by ATSSA and five (5) years of experience in work zone traffic control on freeway/highway projects similar in size and complexity.		
13	Key personnel availability and commitment	Complete Form B (<i>Declaration to Abide By</i>) to confirm the exclusive availability and commitment of the key personnel for delivery of the UP.		
14	Guarantor information (if applicable)	Include the name, address and corporate structure information about anticipated guarantors for the UP.		
15a	Financial background information/data	The proposer and any anticipated guarantors shall provide three (3) years of financial statements for the most recent completed fiscal year or for the period since the most recent completed fiscal year, and each shall include an opinion letter, balance sheet, income statement, statement of cash flow, and footnotes (only required for audited, fiscal year-end financial statements). The financial statements must be in accordance with GAAP or International Financial Reporting Standards, in US dollars, audited, and the text must be in the English language.		
		For the proposer and any anticipated guarantors, if these entities file reports with the Securities and Exchange Commission, then provide the reports through a copy of each respective annual report on Form 10K and Form 8K for the subsequent quarters prior to the submission of the UP.		
16	Information relating to the current transportation plans, if any, of any governmental entity in the jurisdiction of which any portion of the transportation facility is located.	 Include documentation showing the project's applicability to the current STIP and/or RTP to supplement item 5 above. The UP must include the following documentation as applicable: 1. The UP will only be considered to be in the STIP if the project limits match the project description and funding described in the current STIP. 2. The UP will only be considered to be in the RTP if the project limits match the project description and funding described in the current STIP. 2. The UP will only be considered to be in the RTP if the project limits match the project description and funding described in the current RTP. If the project is not in the RTP, but is consistent with the RTP, the UP must include: 	408.5475 2. (e)	

Address All Items Listed				
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
		 a. Private resources as part of the plan of finance that will significantly increase the project benefits and offset public funding. b. Letters of support from the affected agencies that will be involved in making the change to the STIP that include detailed descriptions of the unique benefits they expect to realize by their community. 		
17a	The plans of the person submitting the request contain any penalties for the failure of the person submitting the request to meet any deadline which results in the untimely development or construction of or improvement to the transportation facility or failure to meet any deadline for its more efficient operation.	Complete Form B (<i>Declaration to Abide By</i>) to confirm the proposer's commitment to abide by the penalties to be defined in any ensuing contract.	408.5483 1. (e)	
17b	The long-term quality of the transportation facility will meet a level of performance established by the Department over a sufficient duration of time to provide real value to the public.	Complete Form B (<i>Declaration to Abide By</i>) to confirm the proposer's commitment to abide by the agreed upon quality and penalties to be defined in any ensuing contract.	408.5483 1. (f)	
18a	Risk responsibility/sharing: Critical project elements	Provide risk responsibility and sharing assumptions of the UP regarding the performance of all critical elements of the project, including geotechnical, pavement, earthwork, drainage and structures, right-of-way, utilities, operations and maintenance, and other risks pertinent to the project.		
18b	Risk responsibility/sharing: MOT	Provide risk responsibility and sharing assumptions of the UP regarding maintenance of traffic and winter weather operations by the proposer and the Department.		
18c	Risk responsibility/sharing: Incident response	Provide risk responsibility and sharing assumptions of the UP regarding incident response (ITS, extreme weather, rock falls, accidents, etc.) and which would be handled by the proposer versus the Department.		

	Address All Items Listed				
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments		
19	Executive summary (no more than 5 pages)	 Include a summary of the project's: 1. Purpose and need 2. Method of delivery 3. Key features, risks, and benefits 4. Costs and schedule 5. An organization chart outlining the structure of the project management organization for project development, design, construction, financing, operation and maintenance, and quality structure 			
20	Applicable fees	Provide the applicable fees in accordance with Section 2 of this ITUP and the Cost Sharing Agreement.			
21	Network continuity considerations	 Demonstrate that the network has been thoroughly evaluated by providing the following documentation: 1. A traffic network analysis of the project using modeling software, information and methodologies approved by the affected agencies 2. A traffic analysis of the system with and without the project to demonstrate both the positive and negative effects on network continuity for the existing and planned infrastructure. 3. An analysis of traffic safety and crashes using information over the past 3 years to determine safety benefits. 			
22	Constructability	 Identify topographic, environmental, and other existing features and planned facilities and developments. Identify potential conflicts with each feature and planned element within the corridor. Evaluate and describe the physical, traffic, environmental, scientific, and technical risks and the ability and methods to construct and maintain the facility within the constraints of the corridor for the proposed price and schedule. Provide a summary of identified constructability risks and mitigation measures and an explanation of how the time and cost necessary to mitigate the risks have been incorporated into the CPM schedule durations and project cost. 			

Address All Items Listed				
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
		 Describe the plan to manage traffic during construction while maintaining the flow of traffic and limiting the impacts to businesses and surrounding communities. Describe the project's proposed material source locations and include a comprehensive strategy for how the proposer plans to manage and provide overall logistics, address access and hauling (including ingress and egress of construction equipment in a way to minimize the impact to traffic). Describe a logical project phasing and sequencing approach that aligns with the CPM schedule and proposed traffic management approach. 		
23	Congestion relief potential	 Describe how the project will affect current and future traffic within the project limits, throughout the entire corridor and within the region based on the most recent Department traffic model. 1. Provide a traffic network analysis of the project and interconnecting facilities using modeling software, information and methodologies approved by the affected agencies 2. Evaluate the system with and without the project to demonstrate the positive and negative effects on congestion for the existing and planned infrastructure 3. Summarize the results of the analysis, including the user delay benefits and costs and include documentation to support the work. 4. Evaluate multimodal options included in the governing master plan in the network modeling and summary of results. 		
24	Potential Safety Impacts	 Describe the plan to manage traffic during construction while maintaining the flow of traffic and limiting the impacts to businesses and surrounding communities. Identify and discuss risks and commitments to mitigate risks as a part of the project. Evaluate traffic safety and crashes using information over the past 3 years to determine safety benefits based on the Highways Safety Manual. Provide a summary of improvements that will reduce traffic crashes and quantify the potential benefits to the traveling public. 		

Address All Items Listed				
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
25	Social Impacts	 Describe impacts on the natural environment and other environmental impacts on adjoining properties and communities caused directly or indirectly by the project. Describe the plan to maintain business and property access during and after construction. Identify and discuss risks and commitments to mitigate risks and avoid negative social impacts along the corridor as a part of the project. 		
26	Environmental impacts and status	 Detail the project's environmental status and any potential environmental impacts that will affect that status. 1. Complete Form C (<i>Categorical Exclusions Checklist</i>) to identify potential impacts to each of the listed environmental criteria. 2. Describe each of the permanent and temporary potential impacts in detail. 3. Provide a preliminary assessment report to describe and illustrate the level of impacts to sensitive areas and any proposed mitigation. 4. Provide a list of environmental surveys and studies conducted in the last 10 years that could have an impact on the project. 5. Summarize the due diligence work that has been performed to identify and address the potential environmental impacts. 6. Demonstrate through mapping, field measurements, and design information the physical impacts to all sensitive areas. 7. Include all cost and schedule risk impacts associated with any environmental work that must be undertaken for the project. 8. Include the outreach was conducted with potential environmentally sensitive groups that could have a significant impact on the NEPA clearance/approval process. 		
27	Project status	 Provide the following to describe the status of the project: 1. The narrative of the CPM schedule as described in item 6. 2. Include as a part of the risk matrix (described in item 8): a. An evaluation/assessment of issue/risk probability 		

Address All Items Listed				
Item No.	No. Requirement Detailed Submittal Requirements			
		 b. An approach and course of action to mitigate costs (i.e. eliminate or reduce) c. The likelihood of the issue/risk and any associated cost and other impacts 		
28	Financial Feasibility	 Provide a financial model, including all financial model formulas, assumptions, and information used by or incorporated in the financial model formulas. Note: financial model formulas are defined as the financial formulas that proposer submitted with its plan of finance for projecting post-tax internal rates of return over the term to equity investors. Financial modeling data is defined as all back-up information regarding the basis for the proposer's estimates, projections, and calculations in its UP and in the financial model of revenues, pricing, costs, expenses, repayment of project debt, distributions and internal rate of return, including: 1. Provide a data book submitted with the UP, fully describing all assumptions underlying the estimates, projections, and calculations in the financial model; 2. The step-by-step instructions on the procedures to run and optimize the financial model formulas and financial model submitted with the UP; 3. The traffic model; 4. Copies of all offers, and all data and information within this definition received from all contractors identified in the UP and any other potential contractors that provide data and information used as the basis of the UP; 5. All other supporting data, technical memoranda, calculations, formulas, unit and materials prices (as applicable), and such other cost, charge, fee, and revenue information used by proposer in the creation and derivation of its UP 		
29	P3 concession fee considerations	If a P3 project, include the total amount and timing of any concession fee. Note: If no public subsidy is required (FHWA, NDOT, etc.), the project may be considered for sole source negotiation and delivery.		

Address All Items Listed				
Item No.	Requirement	Detailed Submittal Requirements	NRS Reference or Comments	
30	Sole source considerations	 Indicate whether the proposer intends to negotiate a sole source contract. If a sole source contract is proposed identify and discuss the following: 1. The federal, state, and local laws that apply and the proposer's approach to comply with each law. 2. The specific form and percentage of competitive contracting that will be used to meet the competitive contracting requirements. 3. The risks that funding will be compromised should the approach fail to meet the requirements. 		
31	Lender support	Include letters from potential lenders acknowledging their awareness of the UP and their willingness to consider lending to the project.		
32	Financial feasibility	 Describe the following as part of the plan of finance. If not applicable, indicate as much: 1) What are the revenue generating opportunities and who would benefit from those opportunities? 2) What efforts have been made to secure or what success has been achieved related to securing federal grants (BUILD, INFRA Grants)? 3) What efforts have been made to secure new fees or taxes paid by industrial/manufacturing companies in the region? 4) What discussions have occurred with the TIFIA office regarding the project and what was TIFIA's reaction to the project? 5) What discussions have occurred with the USDOT regarding private activity bonds regarding the project and what was the USDOT's reaction to the project? 6) What are the potential Department resources of funding and financing that could be assigned to the project with a specific rationale as to why this allocation to the UP is a better use than other high priority projects? 7) What discussion have occurred with ratings agencies regarding the project? 		
33	Funding sources and use of funds	Include as part of the plan of finance a list of all sources and uses of funds necessary for delivery of the entire UP. Note: At least 10% of the financial participation must come from the proposer.		

Address All Items Listed				
Item No.	Item No. Requirement Detailed Submittal Requirements			
34	Contingency plans for financing	Include as part of the plan of finance the primary and secondary plan for providing financing for the project with assumed characteristics of the debt (interest rate, tenors, coverage requirements).		
35	Stakeholder and citizenry acceptability	Provide key stakeholder letters of support for the UP.		
36	Impact on Other Projects	 Describe how the project will affect other current and planned projects in and around the project area. Provide a traffic network analysis of the project that includes other active projects and those projects planned for construction in the next 10 years with the potential to impact the project. Apply modeling software, information and methodologies approved by the affected agencies. Evaluate the system both with and without the project to demonstrate the positive and negative effects on the existing, active, and planned infrastructure. Summarize the results of the analysis, including the user delay, benefits and costs, and documentation to support the results Evaluate multimodal options included in the governing master plan in the network modeling and summary of results. 		
37	Long Term Maintenance	Describe the project's long-term maintenance implications and the proposer's approach to operations and maintenance during the contract administration and as a result of this project. Address the roles, responsibilities, risks, cost and schedule as described throughout this ITUP.		

ATTACHMENT B COST SHARING FEE AGREEMENT

This Agreement, made and entered into on **DATE**, by and between the State of Nevada, acting by and through its Department of Transportation (hereinafter "DEPARTMENT") and **NAME AND ADDRESS** (hereinafter "CONTRACTOR"). Individually they are each a "Party" and collectively they are the "Parties."

WITNESSETH:

WHEREAS, the Director of the DEPARTMENT may, pursuant to Nevada Revised Statutes (hereinafter "NRS") Chapter 333 and Chapter 408, contract for technical services that may be required; and

WHEREAS, NRS Chapter 333 authorizes heads of state departments to contract for the services of independent contractors; and

WHEREAS, the DEPARTMENT has determined that a provision of services is required for Unsolicited Proposal Evaluation, and such services are necessary for the Quantitative Evaluation of the Unsolicited Proposal submitted **DATE** (hereinafter "PROJECT"); and

WHEREAS, CONTRACTOR's services may be of great benefit to the DEPARTMENT and to the people of the State of Nevada; and

WHEREAS, the Parties desire to enter into this Cost Sharing Fee Agreement, the receipt and sufficiency of which hereby are acknowledged, and for their mutual reliance.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants hereinafter contained, it is agreed by and between the Parties as follows:

1. The CONTRACTOR agrees to forfeit its nonrefundable Application Fee paid to the DEPARTMENT in the amount of \$5,000 for services rendered in processing and performing the Completeness Review and Qualitative Screening for verification of the Unsolicited Proposal's completeness and compliance with statutory requirements, and its merit in furthering the goals and objectives of the DEPARTMENT.

2. The CONTRACTOR agrees to pay the DEPARTMENT a Quantitative Evaluation Fee Retainer in an amount based on the fee schedule below and calculated on the anticipated capital cost of the project described by the CONTRACTOR's Unsolicited Proposal, to support reimbursement of the DEPARTMENT's cost of the due diligence analysis and the quantitative evaluation of the CONTRACTOR's Unsolicited Proposal (hereinafter "QUANTITATIVE EVALUATION").

Estimated Capital Cost	Quantitative Evaluation Fee Retainer
<\$50 Million	\$ 20,000
\$50 Million up to \$100 Million	\$ 35,000
\$100 Million up to \$250 Million	\$ 60,000
\$250 Million up to \$500 Million	\$ 85,000
\$500 Million up to \$1 Billion	\$110,000
>\$1 Billion	\$135,000

4. The DEPARTMENT will deposit the Quantitative Evaluation Fee Retainer once it has determined that the CONTRACTOR's Unsolicited Proposal has sufficient merit to advance to QUANTITATIVE EVALUATION. Should the DEPARTMENT determine after the Qualitative Screening that the Unsolicited Proposal lacks merit, the Quantitative Evaluation Fee Retainer will be returned to the CONTRACTOR.

5. The DEPARTMENT will assess the anticipated complexity of the QUANTITATIVE EVALUATION. If this assessment determines that the detailed evaluation costs will be materially greater than the Quantitative Evaluation Fee Retainer as reflected in the Quantitative Evaluation Fee Retainer Table in Article 2 of this Agreement, the CONTRACTOR will be contacted in writing and provided with an additional amount which must be paid by certified check or direct wire transfer prior to the commencement of the QUANTITATIVE EVALUATION. If the CONTRACTOR does not wish to incur the additional costs, the Quantitative Evaluation Fee Retainer will be returned, and the Unsolicited Proposal evaluation will be terminated.

6. The DEPARTMENT and the CONTRACTOR will share equally (50/50) any further costs actually incurred by the DEPARTMENT not covered by the Quantitative Evaluation Fee.

7. The DEPARTMENT will refund to the CONTRACTOR the entire amount of any excess fees not used in the QUANTITATIVE EVALUATION of the Unsolicited Proposal.

8. The DEPARTMENT will track the costs incurred on a monthly basis and will provide notice to the CONTRACTOR no less than 30 days prior to incurring any QUANTITATIVE EVALUATION costs over and above the sum total of the Quantitative Evaluation Fee paid by the CONTRACTOR.

9. The DEPARTMENT will provide notice to the CONTRACTOR no less than 30 days prior to completion of the QUANTITATIVE EVALUATION and to notify the CONTRACTOR at this time of any refund anticipated to be owed to the CONTRACTOR.

10. The CONTRACTOR agrees to cooperate with the DEPARTMENT in its review of the CONTRACTOR's Unsolicited Proposal, correcting minor deficiencies in the Unsolicited Proposal as requested by the DEPARTMENT and providing any additional information or clarifications regarding the CONTRACTOR's Unsolicited Proposal as requested by the DEPARTMENT.

11. The CONTRACTOR agrees to comply with all requirements contained in the underlying Instructions to Unsolicited Proposers which is incorporated into this Agreement by reference.

12. The term of this Agreement shall be from the date first written above through and including **DATE**, unless a change extending the term is further agreed to by written amendment signed by all parties to this Agreement and approved by appropriate official action of the governing body of the DEPARTMENT prior to such term expiration date.

13. The CONTRACTOR shall assign one (1) individual throughout the life of this Agreement who shall have overall PROJECT responsibility unless illness or termination requires replacement.

14. This Agreement shall not become effective until and unless approved by the State Board of Examiners **OR** Transportation Board. **ONLY USE PARAGRAPH IF APPLICABLE**

15. This Agreement is contingent upon the verification that the CONTRACTOR has a valid and active Nevada Business License and is in good standing in all areas of the Secretary of State's business requirements. If the CONTRACTOR is an out of state provider, the CONTRACTOR must be registered as a foreign business entity equivalent in Nevada, in active status and in good standing.

16. The DEPARTMENT may terminate this Agreement without cause **NUMBER** (#) calendar **OR** working days after service of a termination letter to the CONTRACTOR. In the event this Agreement is terminated in this manner, the CONTRACTOR shall be paid for any refund of the Quantitative Evaluation Fee owed to the CONTRACTOR up to the date of termination.

17. A default or breach may be declared with or without termination. This Agreement may be terminated by either Party upon written notice of default or breach to the other Party as follows:

a. If any state, county, city, or federal license, authorization, waiver, permit, qualification, or certification required by statute, ordinance, law, or regulation to be held by the CONTRACTOR to provide the goods or services required by this Agreement is for any reason denied, revoked, debarred, excluded, terminated, suspended, lapsed, or not renewed; or

c. If the CONTRACTOR becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of a bankruptcy court; or

d. If the DEPARTMENT materially breaches any material duty under this Agreement and any such breach impairs the CONTRACTOR's ability to perform; or

e. If it is found by the DEPARTMENT that any quid pro quo or gratuities in the form of money, services, entertainment, gifts, or otherwise were offered or given by the CONTRACTOR, or any agent or representative of the CONTRACTOR, to any officer or employee of the State of Nevada with a view toward securing an agreement or securing favorable treatment with respect to awarding, extending, amending, or making any determination with respect to the performing of such agreement.

18. Termination upon a declared default or breach may be exercised after service of written notice and the subsequent failure of the defaulting Party, within fifteen (15) calendar days of service of that notice, to provide evidence, satisfactory to the aggrieved Party, showing the declared default or breach has been corrected. Such correspondence shall be deemed to have been served on the date of postmark.

19. Each party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. It is expressly understood that the duly authorized representatives of the DEPARTMENT and, if necessary in the event federal funds are used for payment, the FHWA, the U.S. Department of Transportation's Inspector General, the Comptroller General of the United States, and/or any of their duly authorized representatives shall have the right to inspect/audit the charges whenever

such representatives may deem such inspection to be desirable or necessary. Such records and documentation shall be maintained for three (3) years after final payment is made.

20. The CONTRACTOR is required to register as a vendor with the Nevada State Controller's office. The Registration Substitute IRS Form W-9 can be accessed at http://controller.nv.gov/VendorServices/Vendor_Services.html. The CONTRACTOR will follow the Registration Instructions, complete the Registration Substitute IRS Form W-9 and submit it to the State Controller's Office.

21. The CONTRACTOR agrees that, prior to any sale, transfer, business name change, change in principals, or any other occurrence that alters this Agreement in any way, the CONTRACTOR shall notify the DEPARTMENT of such intent at least seven (7) calendar days prior to making said change.

22. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

FOR DEPARTMENT:

Kristina L. Swallow, P.E., Director Attn: **DIVISION CHIEF** Nevada Department of Transportation Division: **DIVISION** 1263 South Stewart Street Carson City, Nevada 89712 Phone: **#** Fax: **#** Email: **X**

FOR CONTRACTOR: NAME

FIRM MAILING ADDRESS CITY, STATE, ZIP CODE PHYSICAL ADDRESS CITY, STATE, ZIP CODE Phone: # Fax: # Email: X

23. This Agreement and the rights and obligations of the Parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The Parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

24. As used herein the term "CONTRACTOR" shall include the plural as well as the singular, and the feminine as well as the masculine.

25. Neither Party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder for any reason beyond its control, including, without limitation, strikes, inmate disturbances, acts of God, civil or military authority, act of public enemy, or accidents, fires, explosions, earthquakes, floods, winds, failure of public

transportation, or any other similar serious cause beyond the reasonable control of either Party. In such an event the intervening cause must not be through the fault of the Party asserting such an excuse, and the excused Party is obligated promptly to perform in accordance with the terms of the Agreement after the intervening cause ceases.

26. In signing this Agreement, the CONTRACTOR certifies that it is not engaged in, and agrees for the duration of this Agreement, not to engage in, a boycott of Israel. Boycott of Israel means, refusing to deal or conduct business with, abstaining from dealing or conducting business with, terminating business or business activities with or performing any other action that is intended to limit commercial relations with Israel; or a person or entity doing business in Israel or in territories controlled by Israel, if such an action is taken in a manner that discriminates on the basis of nationality, national origin or religion. It does not include an action which is based on a bona fide business or economic reason; is taken pursuant to a boycott against a public entity of Israel if the boycott is applied in a nondiscriminatory manner; or is taken in compliance with or adherence to calls for a boycott of Israel if that action is authorized in 50 U.S.C. § 4607 or any other federal or state law.

27. The CONTRACTOR shall keep confidential all information, in whatever form, produced, prepared, observed, or received by the CONTRACTOR to the extent that such information is confidential by law or otherwise required by this Agreement.

28. Pursuant to NRS 239.010, information or documents may be open to public inspection and copying. The DEPARTMENT will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

29. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of the Agreement and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

30. Except as otherwise provided for by law or this Agreement, the rights and remedies of the Parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, without limitation, the recovery of actual damages and the prevailing party's reasonable attorney's fees and costs.

31. It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder, or to authorize anyone not a Party to this Agreement to maintain a suit for personal injuries or property damage, or pursuant to the terms or provisions of this Agreement.

32. The Parties hereto represent and warrant that the person executing this Agreement on behalf of each Party has full power and authority to enter into this Agreement and that the Parties are authorized by law to perform the services set forth herein.

33. This Agreement constitutes the entire agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no

modification or amendment to this Agreement shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto and the Attorney General.

IN WITNESS WHEREOF, the authorized representatives of the CONTRACTOR and the DEPARTMENT have caused their names to be signed hereon on the date first above written.

CONTRACTOR:

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

Director

Name and Title (Print)

Approved as to Legality and Form:

Deputy Attorney General

ATTACHMENT C FORMS

Complete all blank spaces in the proposal forms as applicable for the UP. Except as expressly provided in the proposal forms (e.g., requirements to complete the forms, etc.), no substantive change will be allowed to the proposal forms by the proposer.

FORM A

PROPOSER'S ORGANIZATION INFORMATION

Proposer (Individual Firm/Joint Venture [JV]/Partnership/Limited Liability Company [LLC]/Consortium)				
Name of Proposer:				
Type of Entity (Individual Firm, JV, LLC, etc.): _				
Address:	_			
Contact Name:	_ Title:			
Telephone No.:	Fax No.:			
E-mail:				
Local Proposer Contact/Authorized Person				
Name:				
Address:				
Telephone No.:Fa	ax No.:			
E-mail:				

Name(s) of and Information for All Proposer Entity(ies)					
Company Name	Address of Head Office/Phone, Email, and Fax No.	State of Incorporation	Proposed Scope of Work/Services to Be Performed by Entity	% Equity Share	
Principal Participant(s) ^a					

Name(s) of and Information for All Proposer Entity(ies)				
Company Name	Address of Head Office/Phone, Email, and Fax No.	State of Incorporation	Proposed Scope of Work/Services to Be Performed by Entity	% Equity Share
Other Major Participant(s) ^b			-	
Other Firm(s)/ Subcontractors				

If any Major Participant or subcontractor identified above is a single purpose entity formed for the Unsolicited Proposal, complete the following matrix for each such single purpose entity:

Name of major Participant/Contractor	Form of Entity (partnership, joint venture, LLC, corporation, etc.)	Entities with Ownership Interest	Percentage of Ownership Interest
Ex: Contractor AB, JV	Joint venture	Contractor A	60%
		Contractor B	40%

Add additional sheet(s) as necessary.

How many years has Proposer and each Principal Participant^a been in its current line of business and how many years has each entity been in business under its present name?

Name	No. of years in business	No. of years under present name

Under what other or former names have Proposer and each Principal Participant^a operated?

Name	No. of years in business	No. of years under present name

List all Nevada licenses held by Proposer, any Principal Participants, and any Major Participants. Attach copies of all Nevada licenses. Attach a separate sheet if necessary.

Include the following information regarding the surety/bonding companies or banking institutions committing to provide the bonds necessary to meet the requirements of the relevant form of contract for the identified delivery method:

- (a) Name and address of bonding company(ies) that will provide the surety bonds required (must be an Eligible Surety^c).
- (b) Whether or not the listed bonding company has defaulted on any obligation within the past ten years, and, if so, a description and details of the circumstances and the outcome of such default.

The undersigned proposer hereby certifies that it has not entered into any substantive negotiations with Major Participants or other subcontractors resulting in an agreement to enter into any subcontracts with respect to the Unsolicited Proposal, except for those listed in the Form A. Furthermore, undersigned proposer declares under penalty of perjury under the laws of the State of Nevada that the foregoing information on this Form A is true, correct, and accurate.

Executed [_____, 20__].

(Signature of Proposer)

(Name Printed)

(Title)

(Proposer)
Definitions for completing this form

^a Principal Participant means any of the following entities: (a) the proposer; (b) if proposer is a joint venture, partnership, limited liability company or other form of association, any joint venture, partner, or member; and/or (c) all persons and legal entities holding (directly or indirectly) a fifteen percent (15%) or greater interest in proposer.

^b Major Participant means i) each Principal Participant, ii) the lead engineering firm, iii) each member of the proposer's organization with primary responsibility for construction, iv) each member of the proposer's organization with a proposed subcontract identified by the proposer as of when the Unsolicited Proposal was submitted with a value greater than or equal to \$7 million (excluding subcontracts with suppliers), v) each consultant (other than the lead engineering firm) or subcontractor identified by the proposer to perform pavement, landscaping, or other specialty work critical to the success of the proposed project, and vi) each subconsultant responsible for performing more than fifteen percent (15%) of the design value.

^c Eligible Surety means a bonding surety licensed in the State, listed on the U.S. Department of the Treasury's "Listing and Approved Sureties" (found at www.fms.treas.gov/c570/c570.html), rated "A" or higher by at least two of the Major Rating Agencies or rated least A-, X or higher according to A.M. Best's Financial Strength Rating and Financial Size Category.

FORM B

DECLARATION TO ABIDE BY

Name of Proposer: _____

Declaration

Ι.

[insert full name of individual with authority to sign for the proposer]

[Insert organization and address]

acknowledge that the proposer will abide by the process outlined in this Instruction to Unsolicited Proposers and the following:

- Terms and conditions described in the ITUP and the Cost Sharing Fee Agreement.
- The proposer agrees to negotiate in good faith using the Department most recent contract template for the identified delivery method, including terms related to:
 - Penalties for the failure to meet any deadline which results in the untimely development or construction of or improvement to the transportation facility or failure to meet any deadline for its more efficient operation, and
 - The long-term quality of the transportation facility to meet a level of performance established by the Department over a sufficient duration of time to provide real value to the public.
- The proposer or representative thereof through its employees, agents or representatives shall not have any communications regarding the Unsolicited Proposal or proposed project described herein or in the Unsolicited Proposal with any member of the Department, or with any Nevada Transportation Board members, Department staff, advisors, contractors or consultants involved with the procurement, except for communications expressly permitted by the ITUP or except as approved in advance by the Department, in the Department's sole discretion.
- The information provided in the Unsolicited Proposal is accurate and the proposer has done due diligence to commit to the scope, price, and schedule.
- The key personnel included in the proposal will be exclusively available for the delivery of the Unsolicited Proposal.

Executed [______, 20__].

(Signature of Proposer)

(Name Printed)

(Title)

(Proposer)

Form C Categorical Exclusions Checklist

Categorical Exclusions Checklist

Complete checklist to identify potential impacts. Include detailed discussion for each potential impact in the Proposal.

Part 1. GENERAL PROJECT INFORMATION		
PROJECT NAME:		
Click or tap here to enter text.		
PROJECT NUMBER	ENVIRONMENTAL PROJECT MANAGER	DATE CHECKLIST COMPLETED
Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.

Part 2.	Part 2. ENVIRONMENTAL AND NEPA ISSUES							
For the	For the purposes of the Categorical Exclusions, the Proposer affirms that the following information has been reviewed:							
Item	Resource	Detail		Impa	acts fi	rom P	rojec	:t
1	Through Lanes	Results in capacity expansion of a roadway by addition of through lanes.		Yes		No		NA
2	Right-of-Way*	Involves acquisitions (fee simple) of more than a minor amount of right-of-way. A minor amount of right-of-way is defined as not more than 10 percent of any adjacent parcels for transportation-related facilities (e.g., rest areas, intersections, maintenance yards). NOTE: this requirement does not apply to "perfection of title for ROW" projects under 23 CFR 771.117(c)(5).		Yes		No		NA
3	Displacements	Involves acquisitions that result in any residential or non-residential displacement.		Yes		No		NA
4	Early Acquisition	Includes acquisition of land for hardship or protective purposes, or early acquisition pursuant to Federal acquisition project (23 U.S.C. § 108(c)).		Yes		No		NA
5	Section 404 Permit*	Requires a U.S. Army Corps of Engineers Section 404 (33 U.S.C. § 1344) permit other than a Nationwide Permit or a Regional General Permit.		Yes		No		NA
6	Bridge Permit*	Requires a U.S. Coast Guard bridge permit (33 U.S.C. § 401).		Yes		No		NA
7	Historic Properties*	Results in a determination of adverse effect on historic properties pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108).		Yes		No		NA

Part 2.	Part 2. ENVIRONMENTAL AND NEPA ISSUES							
For the	purposes of the Categ	porical Exclusions, the Proposer affirms that the following information has been review	wed:					
Item	Resource	Detail	Impacts from Project			ct		
8	Section 4(f)*	Requires the use of properties protected by Section 4(f) (49 U.S.C. § 303 / 23		Yes		No		NA
	U.S.C. § 138) that cannot be documented with a FHWA de minimis or excep							
	Section 6(f)*	Converts lands under the protection of Section 6(f) of the Land and Water		Yes		No		NA
		Conservation Act of 1965 (54 U.S.C. § 200305), the Federal Aid in Sport Fish						
9		Restoration Act (16 U.S.C. 777-777K, 64 Stat. 430), the Federal Aid in Wildlife						
		Restoration Act (16 U.S>C. 669-669I, 50 Stat. 917), or other unique areas or						
		special lands that were acquired in lee or easement with public-use money and have doed restrictions or covenants on the preperty.						
	Endangorod	Paguires formal consultation under Section 7 of the Endangered Species Act (16		Voc		No		ΝΑ
10	Snecies*	ILS C. 1536)		165		NU		
	Temporary Access	Involves the construction of temporary access or the temporary closure of		Yes		No		NA
	and Road	existing roads bridges or ramps that would result in major traffic disruptions		100		110		1.0.
	Closures*	unless the use of such facilities satisfy the following conditions:						
		1. Provisions are made for access by local traffic and so posted.						
11		2. The temporary access or closure, to the extent possible, will not interfere						
		with any local special event or festival.						
		3. The closure does not substantially change the environmental						
		consequences of the action.						
		4. There is no substantial controversy associated with the closure.						
	Permanent Road	Involves the permanent closure of existing roads, bridges, or ramps, unless the		Yes		No		NA
	Closures*	following conditions are met:						
10		1. No major traffic disruptions.						
12		2. No adverse effects to through-traffic dependent business.						
		3. No closure that substantially changes the environmental consequences						
		0 the action.						
	Access Control*	4. No substantial control of an Interstate highway or disposal of		Ves		No		ΝΔ
13		Interstate right-of-way NOTE: For C(26), C(27), and C(28), any change in		103		NO		11/1
10		access control of an interstate highway will require the use of D(13) instead.						
	Floodplains*	Requires work encroaching on a regulatory floodway or work affecting the base		Yes		No		NA
14		floodplain (100-year flood) elevations of a water course or lake, pursuant to						
		Executive Order 11988 and 23 CFR 650 subpart A.						
15	Wild and Scenic	Requires a Wild and Scenic River Section 7 determination from the river-		Yes		No		NA
15	Rivers*	administering agency.	_				_	

ltem	Resource	Detail	Impacts from Project					
16	Noise	Is defined as a "Type I project" per 23 CFR 772.5 and results in impacted receptors.		Yes		No		NA
17	Air Quality	Does the project require level air quality conformity analysis?		Yes		No		NA
18	Statewide Planning	Is not included in or is inconsistent with the statewide transportation improvement program, and in applicable urbanized areas, the transportation improvement program.		Yes		No		NA
19	Other Circumstances	For situations that are atypical. (Superfund site).		Yes		No		NA
	Description of Proje	ect and its impacts (for resources checked 'yes' please add a description of pr	oject a	and as	sume	ed imp	pacts):

FORM D PROPOSAL PRICE AND SCHEDULE FORM

A. Capital Improvements	Amount (in US Dollars)
Amount from Form D-1	\$

B. Operations & Maintenance	Amount (in US Dollars)
Amount from Form D-2	\$

Proposal Price (A + B)	Amount (in US Dollars)
Proposal Price	\$

Proposer is requesting the above amounts from the Department for the development, design, construction, and/or operation and maintenance of the project as described in the UP. In the event of a conflict between price on this Form D and any other price related forms, the price on this form will govern. All required pricing, revenue, and cost information shall be provided in US\$ currency only. Pricing is to be provided in current year dollars at the time of submitting the proposal.

Itemized breakdowns of elements of the proposal price are shown on Form D-1, D-2.1 and Form D-2.2.

Start of Construction (date shown in CPM Schedule)	Duration to Complete the Identified Capital Improvements	Proposed Schedule (Days)
	Total Duration:	

Proposer affirms that the start of construction date and project duration are the basis for the capital improvements proposal price on this Form D and its associated forms.

Executed	, 20].	

(Signature of Proposer)

(Name Printed)

(Title)

(Proposer)

Registered Engineer: _____

Signature:

FORM D-1

CAPITAL IMPROVEMENT – PROPOSAL PRICE BREAKDOWN

ltem No.	Description	Item Total (in US Dollars)
A – P		•
1	Development Management & Public Outreach	\$
2	Development Design, Design Survey, & Landscape Design	\$
3	Environmental Permitting Activities	\$
4	Right-of-Way Acquisition Services & ROW Survey/Mapping	\$
5	Utility Exploration, Utility Survey, & Utility Adjustment Design	\$
6	Quality Review Firm, Construction Quality Acceptance Firm, & Environmental Team	\$
7	Miscellaneous Professional Services not covered in Lines 1-6	\$
	Subtotal A - Professional Services	\$
B – M	OBILIZATION	
	Mobilization	\$
	Subtotal B - Mobilization	\$
C – G	ENERAL	
10	Site Clearing	\$
11	Utilities	\$
12	Right of Way Acquisition by Developer	\$
	Subtotal C - General	\$
D – C	ONSTRUCTION	
13	Construction Management	
14	Maintenance of Traffic	\$
15	Excavation & Embankment	\$
16	Pavement & Bases	\$
17	Drainage	\$
18	Permanent Signing & Striping	\$
19	Retaining Structures	\$
20	Bridges	\$
21	Electrical	\$
22	Barrier/Cable/Guard Rail and Fencing (Roadway)	\$
23	Landscaping and Aesthetics	\$
24	Maintenance	\$
25	ITS	\$
26	Miscellaneous Construction Items not covered by Lines 1-26	\$
	Subtotal D - Construction	\$
	TOTAL (Total = Subtotal A + B + C + D)	\$

FORM D-2

O&M PROPOSAL SCHEDULE & PRICE

ITEM NUMBERS							
Year of Operation (from Substantial Completion)	(A) Annual Routine O&M Price (in current dollars)	(B) Annual Lifecycle Maintenance (in current dollars)	(C) = (A) + (B) Annual Total O&M Payment				
1	\$	\$	\$				
2	\$	\$	\$				
3	\$	\$	\$				
4	\$	\$	\$				
5	\$	\$	\$				
6	\$	\$	\$				
7	\$	\$	\$				
8	\$	\$	\$				
9	\$	\$	\$				
10	\$	\$	\$				
11	\$	\$	\$				
12	\$	\$	\$				
13	\$	\$	\$				
14	\$	\$	\$				
15	\$	\$	\$				
16	\$	\$	\$				
17	\$	\$	\$				
18	\$	\$	\$				
19	\$	\$	\$				

FORM D-2

O&M PROPOSAL SCHEDULE & PRICE

ITEM NUMBERS							
Year of Operation (from Substantial Completion)	(A) Annual Routine O&M Price (in current dollars)	(B) Annual Lifecycle Maintenance (in current dollars)	(C) = (A) + (B) Annual Total O&M Payment				
20	\$	\$	\$				
21	\$	\$	\$				
22	\$	\$	\$				
23	\$	\$	\$				
24	\$	\$	\$				
25	\$	\$	\$				
26	\$	\$	\$				
27	\$	\$	\$				
28	\$	\$	\$				
29	\$	\$	\$				
30	\$	\$	\$				
TOTALS	\$	\$	\$				
	\$						

FORM D-2.1

ROUTINE OPERATIONS AND MAINTENANCE – PROPOSAL PRICE BREAKDOWN

		- · · ·	Drainage	Noise and Retaining	Signs and Traffic	Incident	Miscellaneous	Annual Routine O&M
YEAR	Roadway	Bridges	Facilities	Walls	Control	Response	Items	Price
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

			Drainage	Noise and Retaining	Signs and Traffic	Incident	Miscellaneous	Annual Routine O&M
YEAR	Roadway	Bridges	Facilities	Walls	Control	Response	Items	Price
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

FORM D-2.2

LIFE CYCLE MAINTENANCE – PROPOSAL PRICE BREAKDOWN

			Drainage	Noise and Retaining	Signs and Traffic	Incident	Miscellaneous	Lifecycle Maintenance
YEAR	Roadway	Bridges	Facilities	Walls	Control	Response	Items	Price
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

			Drainage	Noise and Retaining	Signs and Traffic	Incident	Miscellaneous	Lifecycle Maintenance
YEAR	Roadway	Bridges	Facilities	Walls	Control	Response	Items	Price
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Handback Amount								
Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Appendix J

References

For more information on the topics in these Guidelines, see:

- 1. Arizona Department of Transportation (ADOT). *Design-Build Procurement and Administration Guide*. Third Edition. December 2011.
- 2. City of Augusta, Georgia. Partnership for Public Facilities Act of 2015. *Model Guidelines*. July 2016.
- 3. Colorado Department of Transportation. Design-Build Manual. September 2016.
- 4. Colorado Department of Transportation, High Performance Transportation Enterprise (HTPE), *P3 Management Manual*, December 2017.
- 5. The Commonwealth of Pennsylvania. Providing for Public Private Transportation Partnerships Implementation Manual & Guidelines. November 2015
- 6. District of Columbia, Office of Public Private Partnerships (OP3). *Guidelines and Procedures*. October 2016.
- 7. Virginia Department of Transportation, PPTA Implementation Manual and Guidelines, October 2017.
- 8. FHWA Center for Innovative Finance Support. Public Private Partnerships. P3 Toolkit and Guidebooks. fhwa.dot.gov.
- 9. Washington State Department of Transportation (WSDOT). *Guidebook of Design-Build Highway Project Development*. January 2020.



