

ADDENDUM NO. 1

RFP No. 22-09

I-25 San Antonio Interchange Phase I-A/I-B

9/16/2021

To Whom It May Concern:

The New Mexico Department of Transportation (NMDOT or Department) has received the following question submitted along with the Department's response. Attached to this addendum No.1: It shall be the responsibility of the interested Offerors to adhere to any changes or revisions to the RFP as identified in this Addendum No. 1. This documentation shall become permanent and made part of the Department's procurement file.

Question: In reviewing RFP 22-09 I-25 San Antonio Interchange, I noticed that there are two forms that request the same info:

- Appendix D, pages 85-87
 - Appendix D
See attached, Completed Campaign Contribution Disclosure Forms
(Attach from proposal)
CAMPAIGN CONTRIBUTION DISCLOSURE FORM
- Appendix E, pages 91-93
 - Appendix E to RFP 22-09
CAMPAIGN CONTRIBUTION DISCLOSURE FORM

Would you like both forms included in consultant proposals, or one of them specifically?

**Michelle Lujan
Grisham**
Governor

Michael R. Sandoval
Cabinet Secretary

Commissioners

Jennifer Sandoval
Commissioner, Vice-Chairman
District 1

Bruce Ellis
Commissioner
District 2

Hilma E. Chynoweth
Commissioner
District 3

Walter G. Adams
Commissioner, Chairman
District 4

Thomas C. Taylor
Commissioner
District 5

Charles Lundstrom
Commissioner, Secretary
District 6

Answer: Appendix E to RFP 22-09, pages 91-93, Campaign Contribution Disclosure Form is a requirement for the offeror's proposal submission. There are appendices to the RFP as well as the contract template in the RFP advertisement. Appendix D, pages 85-87 is an appendix to the contract template. (example of what the contract will look like, if awarded)

Revisions to RFP 22-09:

Appendix A TO RFP 22-09: Scope of Work is hereby deleted and replaced with the following:

APPENDIX A – PROJECT INTRODUCTION AND SCOPE OF WORK

Request for Proposals No. 22-05

CN: 1102060

Phase I-A/I-B (Detailed Evaluation of Alternatives)

APPENDIX A – PROJECT INTRODUCTION AND SCOPE OF WORK

Scope of Work – 1102060

RFP 22-09

General Information:

Control Number (CN):	1102060
Project Number:	1102060
Type of Work:	Phase I-A/I-B (Detailed Evaluation of Alternatives)
Posted Route:	I-25
Limits:	MP 139 to MP 140
Posted Route:	US-380
Limits:	MP 0 to MP 0.5
Total Length:	1.5 miles
NMDOT District:	One
County:	Socorro
Functional Classification:	Interstate/Major Collector
Terrain Type:	Rolling
Construction Programmed Year:	TBD
Anticipated Letting Date:	TBD
Project Development Engineer:	Mark Salazar, P.E.
Urban or Rural:	Rural

Existing Conditions:

Interstate 25 (I-25) is the major north/south interstate system. The project study limits are located on I-25 between mileposts 139 and 140, at the I-25/US-380 San Antonio Interchange.

Within the project area, I-25 is a rural, divided four-lane roadway located near the Community of San Antonio (I-25, Exit 139), just south of Socorro, New Mexico. I-25 consists of two 12-ft lanes in the northbound and southbound directions with 10-ft outside shoulders and 4-ft inside shoulders. The posted speed limit on I-25 is 75 mph within the project area. The posted speed limit on US-380 is 45 mph where the I-25 northbound exit ramp merges with US-380 then reduces to 40 mph about 1,500 feet east towards San Antonio.

The existing I-25/San Antonio Interchange configuration consists of single northbound exit ramp that connects directly to US-380 and a single northbound entrance ramp from US-380 that connects directly to I-25. The southbound entrance ramp from US-380 is a clover leaf shape that connects directly to I-25 and the southbound exit ramp connects directly to US-380. The southbound entrance and exit ramps pass underneath I-25 Bridges #6455 and #6454 with a 16-ft 7-in vertical clearance. The southbound I-25 exit ramp includes Walnut Creek Bridge #3168, built in 1939, which is a multiple concrete box bridge culvert. The concrete aprons and the inlet and outlet show signs of spalling and delamination. A significant portion of the wire enclosed riprap and gabion baskets at the outlet side of the structure have been washed away. There is also a double barrel concrete box culvert located about 350-ft to the north of Bridge #3168.

In addition to the culverts mentioned above, there are three culvert structures crossing I-25 near the northbound exit ramp and Bridge # 6454. There are also two culvert structures crossing I-25 near the southbound exit ramp gore. There are multiple arroyos that drain to these interchange culverts and bridge structures and discharge in areas within the community of San Antonio. Significant flooding occurred several years ago in San Antonio that may have resulted from capacity issues of these structures.

I-25 Bridges #6454, 6455, and Walnut Creek Bridges #6456 and #6457 lie within the interchange study limits and were built in 1964. Bridges #6454 and #6455 decks show signs of moderate transverse and longitudinal cracks, leaching and delamination. Walnut Creek Bridges #6456 and #6457 decks also show signs of moderate transverse and longitudinal cracks, leaching and delamination.

Channel slopes at abutments show major erosion and loss of rip-rap. Pier caps have moderate transverse and longitudinal cracks.

Fees:

It is the intent of the NMDOT to negotiate a fixed price for the following services:

- Phase I-A/I-B (Initial and Detailed Evaluation of Alternatives)

Based on available funding, NMDOT may elect to negotiate a fixed price for Phase IC (Environmental Documentation Process), Phase ID (Preliminary Design Services), Phase II (Final Design) and Phase III (Construction Engineering Services) by Contract Amendment or elect to pursue a new RFP. The fixed price and negotiated compensatory fees shall be paid based on percentage complete for the required services.

Partial payments shall be made monthly as the work progresses. Payment applications will be accompanied by a certified statement of work accomplished in accordance with this contract and as approved by the Project Development Engineer. Partial payments shall be based upon percentage of work completed broken down into direct labor, labor overhead, direct costs, sub-contract expense (also broken down) and a fee. The fee is a percentage factor applied to labor and labor overhead costs.

Note: A cost plus a percentage of cost, or a percentage of construction cost method of determining the fee will not be used.

Scope of Work:

The proposed study will provide detailed analysis of all identified roadway constraints and operational safety analysis to determine the recommended improvements of the project area. The following will be assessed in the Phase I-A/I-B study:

- The existing roadway typical sections, including pavement conditions, realignment and/or reconfiguration of existing interchange to include mainline, entrance and exit ramps.
- The evaluation of acceleration/deceleration lanes for all interchange ramps.
- The evaluation of existing Bridges #3168, #6454, #6455, #6456 and #6457 structures for rehabilitation or replacement.
- Drainage analysis of existing culverts and bridge structures and of proposed culverts and bridges for interchange improvements.

Phase I-C Environmental Investigations and Documentation (by negotiated contract amendment or by new RFP) will include the development and submittal for approval of an Interstate Access Change Request (IACR) for interchange layout changes to the NMDOT and the Federal Highway Administration (FHWA) for approval following the Interstate System Access Information Guidelines. This report shall address the policy requirements established by the FHWA for Interstate System Access Change Requests.

The overall project scope of services for the Study is to:

I-25/San Antonio – Interchange (Exit 139)

Evaluate the need to improve the alignments and/or reconfiguration of existing interchange to include mainline, entrance and exit ramps to meet current design standards and the addition of acceleration and deceleration lanes. The existing roadway pavement conditions shall also be evaluated to meet current design standards.

Existing Bridges (Bridge #3168, 6454, 6455, 6456, 6457):

Evaluate the need to rehabilitate or replace bridges to meet current design standards.

Drainage

Drainage analysis of existing culverts and bridge structures within the interchange improvements and impacted downstream structures as well as necessary modifications to accommodate proposed bridge and ramp designs, including existing and/or new culverts, channel design, bridge rundowns, erosion and scour control measures and possible storm drain system.

Improvements to mitigate erosion to Walnut Creek are currently being designed under control number (CN) 1102040. A need has been identified for these improvements at Walnut creek and construction funding has been programmed. Coordination between the 1102040 design and 1102060 San Antonio study phase will be required as the selected alternative for the San Antonio interchange may impact the Walnut Creek improvements. **The CN 1102060 study preferred alternative will incorporate the CN 1102040 final design which can be further built upon through the design phases of CN 1102060.** Drainage reports for Walnut Creek CN 1102040 will be made available.

Engineer Responsibilities:

The Engineer shall be responsible for all studies, analysis, coordination, engineering, right-of-way activities, and all else required to complete Phase I-A/I-B Services. The Engineer has total responsibility for the accuracy, completeness and correctness of all reports, plans and related data prepared under the terms of the Contract.

The work performed by the Engineer shall be in accordance with the Guidelines for Geometric & Roadway Design and Surveying, or if required, transit design guides. All work accomplished under the Contract shall be in accordance with the latest editions of the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on the Geometric Design of Highway and Streets;" AASHTO LRFD Bridge Design Specifications, with interim revisions; Federal Highway Administration (FHWA) Policy; the NMDOT Survey Handbook; and other current NMDOT manuals, standards, guidelines, standard specifications and standard procedures. All documents shall have only imperial units including right-of-way documents. The Engineer shall not deviate from standard geometric design without the express written approval of the NMDOT.

Acceptance of the work by the NMDOT and contract termination does not constitute NMDOT approval and will not relieve the Engineer of the responsibility for subsequent corrections of any errors and omissions and the clarification of any ambiguities. The Engineer shall make all necessary revisions or corrections resulting from errors and/or omissions on the part of the Engineer without additional compensation. If these errors and/or omissions are discovered during the construction of the project, they shall be corrected under Phase III services without additional compensation. All required National Environmental Policy Act (NEPA) documentation, permits, clearances, right-of-way needs, construction costs, project documentation, construction letting package and all project specific specifications will be developed and provided by the Engineer as part of the overall design process. It will be the Engineer's responsibility to interact with the public and all branches of government and other agencies to incorporate feedback throughout the design stages.

Although every effort has been made to describe fully the scope of services, it is anticipated that changes may be required during the course of the project to accommodate input from the public, other agencies within the NMDOT and other agencies outside of the NMDOT. Changes to the scope of work that may be required to provide a complete project shall be negotiated and authorized by an amendment to the Contract as they are identified.

The Engineer shall perform work services under Phase I-A/I-B. The services require, but are not limited to, the following:

**1. Phase I-A/I-B: Alignment Study –
Identification and Detailed Evaluation of Alternatives**

a. Description

The primary purpose of this study is to evaluate the alignment alternatives for the I-25/San Antonio Interchange mainline and ramps at Exit 139, the possible addition of acceleration and deceleration lanes, the evaluation of the existing bridge structures, and the evaluation of the existing drainage structures and upstream contributing drainage areas.

The study will provide detailed analysis of all identified roadway constraints and safety analysis to determine the recommended improvements for the project area. The analysis will identify an acceptable Level of Service (LOS) for the project study area and a safety study will be completed using the Highway Safety Manual requirements.

This work involves the development and preparation of a Phase I-A/I-B Alignment Study Report in accordance with the latest edition of the NMDOT Location Study Procedures: A Guidebook for Alignment and Corridor Studies. The primary purpose of this project study is to provide recommendations for improvements to the existing facilities and/or construction of new facilities including, but not limited to:

- Information gathering, review and documentation of all previous work;
- Existing Conditions Assessment;
- Survey and/or mapping, as required;
- Identification of Right-of-Way impacts of alternative alignments;
- Agency coordination and meetings;
- Scheduling and conducting Project Kick-off and Stakeholder meetings;
- Purpose and Need Analysis;
- Detailed inventory of existing transportation conditions;
- Analyze physical condition of existing facilities;
- Analyze land use and growth trends;
- Analyze existing and future traffic conditions;
- Detailed Transportation Needs Analysis;

- Safety Study Analysis;
- Environmental Documentation and Processing Plan;
- Environmental Investigations and Analysis;
- Stakeholder and Public Involvement Plan;
- Preliminary Drainage Report;
- Geotechnical Scoping Report;
- Identify and evaluate all viable alternatives;
- Utility Investigations, SUE Quality Level C (anticipated);
- Conceptual design, constructability and construction cost estimates for phased projects;
- Conceptual right-of-way requirements;
- Context Sensitive Solutions Program;
- Context Sensitive Public Involvement (Section 14.c);
- Input Synopsis (Section 14.e);
- Detailed engineering analysis;
- Quality Control Plan;
- Phase I-A/B Documentation – Detailed Evaluation of Alternatives Report, Phased Construction Projects and Conclusions.

b. Deliverables

The Engineer shall provide two (2) hard copies and one (1) flash drive or FTP site containing an electronic file (.pdf format) of a concise report for the Alignment Study summarizing the major findings along with recommendations of the detailed evaluation of the alignment for NMDOT review and approval. After the NMDOT has reviewed and approved the document, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final report to the NMDOT.

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) of the draft Geotechnical Scoping Report. After the NMDOT has reviewed and approved the document, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final report to the NMDOT.

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) of the Transportation Needs Analysis and one (1) hardcopy and one (1) electronic copy (.pdf format) of the Safety Study Analysis to the NMDOT.

After the NMDOT has reviewed and approved the documents, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) for the final reports to the NMDOT.

The Engineer shall provide minutes of the Project Kick-off and Stakeholder meetings, including comments received and responses.

Minutes shall be submitted within one (1) week of the meeting.

If Phase I-C, Phase I-D and Phase II Final Design Engineering Services are required for this project, those services will be negotiated and added by contract amendment or by new RFP. The scope of services will be detailed in the amendment to the contract or the new RFP.

Phase I-C Services include Environmental Investigations and Documentation, Phase I-D Services include the preparation of preliminary design plans and Phase II Services include the preparation of plans and associated documents required to advertise and let the phased projects, and coordination of all design review meetings.

Phase I-C, Phase I-D and Phase II Engineering Services shall include, but are not limited to the following:

2. Phase I-C: Environmental Investigations and Documentation (by negotiated contract amendment or by new RFP)

a. Description

Based on the scope of work outlined in this RFP, the level of effort for the Environmental Clearance will be determined based on project scope and the Engineer will complete the work necessary to obtain federal approval based on the determined level of effort for the project. The use of federal funds for construction of this project requires adherence to federal and state law including, but not limited to NEPA, which requires the identification and assessment of impacts associated with a proposed action, and mitigation of impacts if necessary. Executive Order 11988, Floodplain Management, requires that any potential impacts to floodplain areas be identified and assessed in order to reduce the risk of flood loss, and to minimize the impact of flooding.

The Phase I-C services required include, but are not limited to the following:

- Conduct environmental and cultural resource investigations;
- Interchange Access Change Request (IACR)
- Agency coordination;
- Context Sensitive Public Involvement Plan (CSPIP) and Property Owner Interviews, if applicable;
- Coordinate and conduct Public Meetings and Public Hearings (if required);
- Prepare Environmental and Cultural Resource Documentation including:
 - Biological Assessment and Cultural Resources Report;
 - Categorical Exclusion (CE) and all supporting documentation, or Finding of No Significant Impact (FONSI) re-evaluation and all supporting documentation;
 - Public Meeting Summary or Input Synopsis (if required);
 - FONSI request and FONSI (if required);
- Quality Control Plan.

b. Deliverables

Provide draft reports electronically to the NMDOT Environmental Bureau for review. After NMDOT Environmental Bureau has reviewed and approved the document, the Engineer shall submit three (3) hard copies of cultural report and one set of archival forms as needed, and electronic files (PDF) of the final biological and cultural reports and any associated forms that are requested. Submit GPS files for any resources requiring management consideration.

The Engineer shall provide one (1) draft electronic copy (MSWord format) of the NEPA Document to the Environmental Bureau. After the NMDOT has reviewed and approved the document, the Engineer shall submit an electronic copy (.pdf format and MSWord format) of the final NEPA Document with all supporting resource documentation to the NMDOT. The Engineer shall provide sufficient copies of the NEPA Document and mail them for appropriate public and agency review of the document, if needed.

If during environmental investigations the NMDOT determines that significant environmental impacts may exist, the Engineer shall prepare an Environmental Assessment (EA) and shall provide one (1) draft electronic copy (MSWord format) of the EA, request for FONSI and FONSI to the Department. After the NMDOT has reviewed and approved the documents, the Engineer shall provide sufficient copies of the EA and mail them for appropriate public and agency review of the document and provide ten (10) hard copies and twenty-five (25) CD's containing an electronic file (.pdf format) of the approved EA (with FONSI attached) to the NMDOT, plus additional copies for agencies and other interested parties. The Engineer shall also provide five (5) hard copies and one (1) CD containing an electronic file (.pdf format) of the Input Synopsis to the NMDOT.

3. Phase I-D: Preliminary Design (by negotiated contract amendment or by new RFP)

a. Description:

The Phase I-D design services required include, but are not limited to the following:

- Coordination and Design Partnering;
- Survey and/or mapping;
- SUE Quality Level B – Designation – Utility Coordination with NMDOT Utility Section;
- Preliminary Roadway, Traffic Control and Bridge Design Plans;
- Design and Constructability Review;
- Bridge Structure Type Selection Report (BTS);
- Schedule and Conduct a Preliminary Design and Constructability Review;
- Preliminary Property Ownership Layout Maps;
- Context Sensitive Design Activities and Documentation;
- Preliminary engineering estimate;
- Preliminary Geotechnical and Foundation Study Report;
- Soils Analysis and Report for NMDOT Pavement Design;
- Subgrade soils testing and pavement testing for pavement design;
- Determination of right-of-way and mapping (if required);
- Quality Control Plan.

b. Deliverables – Preliminary Design Plans and Documents(by negotiated contract amendment or by new RFP)

The Engineer shall submit and distribute six (6) bound sets of plans (11" x 17" reduced) and one (1) flash drive or FTP site containing an electronic file (.pdf format) of plans for the preliminary design review.

The Engineer shall provide one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the BTS to the NMDOT. After the NMDOT has reviewed and approved the document, the Engineer shall submit four (4) bound hardcopies and one (1) electronic copy (.pdf format) of the BTS. The Engineer shall provide one (1) bound hard copy and one (1) electronic copy (.pdf format) of all bridge and structural computations to the NMDOT Bridge Bureau.

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) of the draft Preliminary Geotechnical and Foundation Reports to the NMDOT. After the NMDOT has reviewed and approved the documents, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final reports to the NMDOT.

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) for each Signal Warrant Study to the NMDOT. After the NMDOT has reviewed and approved the documents, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final reports to the NMDOT.

The Engineer shall provide one (1) hardcopy and one (1) electronic (.pdf format) of the preliminary IACR's to the NMDOT. After the NMDOT and FHWA have reviewed and approved the documents, the Engineer shall submit two (2) bound hardcopies and one (1) electronic copy (.pdf format) of each final IACR to the NMDOT for signed approval.

The Engineer shall provide one (1) electronic copy (.pdf format) of minutes of the preliminary design and constructability review meeting, including comments received and responses. The minutes will be submitted within one (1) week of the plan review meeting.

All design data and computer-aided-drafting (CAD) drawing files supplied under contract shall be produced and submitted to the NMDOT in a native Autodesk® (.dwg) file format at the current department standard version.

The NMDOT is currently utilizing Autodesk® AutoCAD 2018 and Autodesk® AutoCAD Civil 3D 2018 as its standard version.

4. Phase II Services – Final Design (by negotiated contract amendment or by new RFP)

If Phase II Final Design Engineering Services are required for this project, those services will be either be negotiated and added by contract amendment or by new RFP. The scope of services will be detailed in the amendment to the contract or the new RFP.

It is the intention of NMDOT to develop phased projects and let the first project for a projected production date of January 2024. Phase II Services include the preparation of plans and associated documents required to advertise and let the phased projects, and coordination of all design review meetings.

Phase II Final Design Engineering Services shall include, but are not limited to the following:

- Coordination and Design Partnering;
- Public involvement and relations;
- SUE Quality Level A – Locating and Mapping;
- Visual Aesthetics and Landscape Architecture;
- Environmental Bureau follow-up;
- National Pollutant Discharge Elimination System (NPDES);
- Right-of-way design and real estate services (if required);
- Final Geotechnical and Foundation Reports;
- Final Drainage Study and Report;
- Final (Approved) AASHTOWare Bridge Rating (BrR) Models (if applicable);
- Pre-Final (60% completion), Final (90% completion) and PS&E (100% completion) Roadway, Bridge, Signing, Striping, Traffic Control Plans and Lighting Plans (if applicable);
- Bridge design calculations (if applicable);
- Design and Constructability Review;
- Continued Context Sensitive Design Activities and Documentation;
- Production submittal;
- Quality Control Plan.

Engineer shall provide Pre-final (60% completion), Final (90% completion), PS&E (100% completion) and Production plans for the phased projects.

The design plans shall include, but are not limited to, the following:

- General Sheets
 - Title Sheet
 - Vicinity Map
 - Project Layout Sheet
 - Index of Sheets
 - Summary of Quantities
 - General Notes
 - Environmental commitments
- Miscellaneous Sheets
 - Typical Sections
 - Miscellaneous Details
 - Surfacing Schedule
 - Structure Quantities
 - Miscellaneous Quantities
 - Guardrail Layouts
 - Curb and Gutter and Sidewalk Layouts (if applicable)
 - Erosion and Sediment Control
 - Seeding and Landscaping (if applicable)
 - Grading Plans
 - Visual/Aesthetic Details (if applicable)
- Plan and Profiles Sheets
 - Mainline and ramps
- Turnout Profiles (if applicable)
- Bridge and Retaining Wall Plans (if applicable)
 - General Notes
 - Estimate of Quantities
 - Location Plan, Elevation and Typical Section
 - Superstructure Details
 - Substructure details as appropriate
 - Foundation Notes as appropriate
 - Reinforcing Schedule
- Traffic Control Plans
 - Notes
 - Sequence of Construction

- Sign Face Details
- Traffic Control Plans
- Lighting Plans (if applicable)
 - Lighting Analysis
 - Lighting Plan
- Signalization Plans (if applicable)
- Permanent Signing and Striping Plans
 - Plans
 - Overhead Signs
 - Sign Face Details
- Drainage Plans (if applicable)
 - Plan and Profile
 - Structure Sections
- Roadway and Earthwork Cross-Sections

The Engineer shall submit the draft contract book at each design submittal beginning at the pre-final (60%) submittal. In developing the draft contract book, the Engineer shall use the NMDOT PS&E Section's most recent boilerplate contract book. The draft contract book shall include, but is not limited to, the following:

- Project Specific Notices to Contractors
- Standard Notices to Contractors
- Project Specific Special Provisions

a. Context Sensitive Solutions

The NMDOT is committed to a Context Sensitive Solutions/Context Sensitive Design (CSS/CSD) approach to project development for all projects in project development. CSS/CSD is first and foremost to the NMDOT in carrying out its mission of providing for the safety and mobility of the public. The goal of CSS/CSD is to encourage an open, interdisciplinary framework in which project teams can develop roadway designs that fully consider the aesthetic, historic, cultural, and scenic values along with considerations of safety and mobility – the essence of CSS/CSD.

A successful CSS/CSD project includes effective decision-making, implementation and outcomes that reflect community values and are sensitive to environmental resources. This results in project solutions that are safe and financially feasible.

For background information on Context Sensitive Design, the Engineer is referred to NCHRP Report 480, "A Guide to Best Practices for Achieving Context Sensitive Solutions", Transportation Research Board (TRB), 2002. An additional reference is Flexibility in Highway Design published by the FHWA. This design guide illustrates how it is possible to make highway improvements while preserving and enhancing adjacent lands and communities. Flexibility in Highway Design urges highway designers to explore options beyond those used in the AASHTO "A Policy on the Geometric Design of Highways and Streets". The Consultant shall integrate Context Sensitive Solutions into Design Approaches to the project.

If special or unique Context Sensitive Solutions are required for the project, those services may be negotiated and added by contract amendment.

b. Design Completion Reviews

The Engineer shall schedule and conduct the project design reviews. The reviews shall be held for the entire project or separate projects depending on the Engineer's project priority plan for design and construction.

The NMDOT will provide review of the Engineer's work for conformity with NMDOT procedures and the Contract terms only. Review by the NMDOT does not include detailed review or checking of design components and related details or the accuracy with which such is depicted. NMDOT acceptance of the Engineer's work product, plans, studies, etc., does not constitute NMDOT approval.

c. Deliverables – Pre-Final, Final and PS&E Design Plans and Documents

The Engineer shall submit and distribute five (5) bound sets of plans (11" x 17" reduced) and one (1) flash drive or FTP site containing an electronic file (.pdf format) of plans for each design review.

The Engineer shall submit three (3) bound hardcopies and one (1) electronic (.pdf format) of all bridge and structural computations to the NMDOT Bridge Bureau.

The Engineer shall provide minutes one (1) electronic copy (.pdf format) of all meetings, including comments received, and responses.

These minutes will be submitted within one (1) week of the plan review meeting.

All design data and computer-aided-drafting (CAD) drawing files supplied under contract shall be produced and submitted to the NMDOT in a native Autodesk® (.dwg) file format at the current department standard version. The NMDOT is currently utilizing Autodesk® AutoCAD 2016 and Autodesk® AutoCAD Civil 3D 2016 as its standard version.

d. Production Documents

The Engineer shall provide the PDE with original copies of all documentation associated with the PS&E Production checklist. The Production plan set (original and one copy), special provisions, and other documents when directed by the PDE, shall be signed & sealed by the Engineer in responsible charge, which are licensed by the State of New Mexico.

5. Phase III Services (by negotiated contract amendment or by new RFP)

a. Description:

Services to be provided by the Engineer during Construction: If engineering services during construction are required for this project, those services will be negotiated and added by contract amendment or by new RFP. The services will be detailed in New RFP or in the amendment to the contract. Engineering Technical Support Services during Construction may include but not be limited to:

- Requests for Information (RFI's)
- Review of submittals
- Design Clarifications
- Plan Revisions
- Review of Contractor developed construction SWPPP
- Review of Contractor Proposed Cost Savings
- Review of Proposed Price Increases or Decreases

6. Aerial Photography, Location and Topographic Survey

a. Description

The Engineer/Surveyor shall provide required location and topographic survey for the entire project limits suitable for planning and design. Existing right-of-way shall be surveyed and made known with the location survey and mapping deliverables, along with but not limited to, all fences, structures, utilities, signs, break-lines, and encroachments.

Encroachments shall include owners name and address with perpendicular distance(s) from right of way. All surveying and mapping activities shall be performed by a qualified Professional Surveyor licensed in New Mexico and shall meet the Minimum Standards for Surveying in New Mexico (12.8.2 NMAC). The Engineer/Surveyor is responsible for establishing primary project control if not provided by the NMDOT Geodetic Unit, and shall prepare a Project Control Map per the NMDOT's requirements. The engineer is responsible for coordinating all surveying and mapping efforts required for design and determination of right-of-way impacts due to design. The Engineer shall submit the person-hour and fee proposal for the location survey and mapping efforts to the Project Development Engineer for review by the Survey and Lands Engineering staff.

b. Deliverables

All survey, mapping (existing, right-of-way, and monumentation), and preliminary design data shall be created and submitted to the Department in AutoCAD/Civil 3D format and NMDOT CAD Survey template adhering to the standards set by the Department for the use of that software. All design related data files must be produced using AutoCAD/Civil 3D software products. Electronic files submitted shall include, but are not limited to, geometry, points, surfaces, alignments, aerial imagery if acquired for photogrammetric mapping, coordinate system details, calibration reports, survey notes, survey field books (electronic and scanned field books with structure details), and survey data collection files. Standards and resource files are available upon request from the Engineering Automation Section. NMDOT will only accept projects delivered on CD-ROM, flash drive or external hard drive. Data is not to be compressed by any software.

All surveying and mapping activities, including surveys for Subsurface Utility Engineering (SUE) services, shall be performed by a qualified Professional Surveyor licensed in New Mexico and shall meet the Minimum Standards for Surveying in New Mexico (12.8.2 NMAC).

7. Existing ROW Research

a. Establish Existing ROW

In addition to work included above in item 6.

Aerial Photography, Location and Topographic Surveying, this work will include establishing existing ROW. Existing right-of-way shall be surveyed and made known with the location survey and mapping deliverables, along with but not limited to, all fences, structures, utilities, signs, break-lines, and encroachments.

b. Preliminary Property Ownership Maps

If encroachments are identified and/or right-of-way maps are required, provide Preliminary Property Ownership Layout Maps. These maps may be prepared and developed by research/investigation of county records through County Assessor map/info and GIS shapefiles. This information should be acquired and shown from the sources mentioned. Preliminary property ownership maps are for informational purposes only and do not require boundary retracement efforts to identify assessor information on a clearly illustrated map.

Maps shall be prepared at a horizontal scale of 1" = 100' and a vertical scale of 1" = 10'. Provide one (1) hard copy of the Preliminary Property Ownership Layout Maps to the NMDOT Lands Engineering Section. The Engineer/Surveyor shall submit the person-hour and fee proposal for preliminary property ownership mapping efforts to the Project Development Engineer for review by the Survey and Lands Engineering staff.

c. Encroachment Research

If identified, encroachments shall be included in the survey information, and should include owners name and address with perpendicular distance(s) from right of way.

d. ROW and Monumentation Maps (if applicable)

Right-of-Way mapping shall be included in Phase II Services.

Right-of-Way (ROW) mapping shall be performed in accordance with the NMDOT Right of Way Mapping Development Procedures. The Engineer/Surveyor will prepare ROW maps for presentation and review at the pre-final design inspection review.

Immediately following the review and prior to the final inspection design review, the Engineer shall submit three (3) full size final ROW Map print sets of the final ROW Map with one copy of all documents including legal descriptions, alignment geometry, and acquisition parcel computations to the ROW Verifications Unit Supervisor for first review (99% complete as per ROW Mapping Development Procedures Manual checklist).

Original 33-year Title Reports and Current Owner Reports, if required, shall be submitted to Lands Abstracting Unit for approval and acceptance prior to first review submittal. If any portion of the alignment has changed or other major changes occur to the ROW maps presented for the first review, these changes, revisions, etc. should be brought to the attention of the Lands Engineering ROW Verifications Unit Supervisor. The section supervisor shall be apprised of any changes and these changes may result in additional time necessary for reviews by the ROW Verifications Engineering Unit.

Ownership shall be shown on the ROW maps exactly as listed in the title reports. The final ROW Maps shall locate all ROW fee parcels and construction maintenance easements (CME's). Temporary construction permit (TCP) locations shall also be shown on the map if they are located in areas for which mapping has been developed. All TCP's shall be listed on the parcel block sheet of the final ROW Maps as well as shown on the plan and profile sheets. All encroachments shall be identified on the ROW maps within the ROW boundaries shown on the maps prepared for Final Right-of-Way. The Department will not provide an extensive detail check of any of the final maps and plans. The Engineer/Surveyor is fully liable for any errors and/or omissions in the final ROW Maps, legal descriptions, and subsequent monumentation mapping and staking. Acceptance of the final ROW Map or other work products developed by the Engineer/Surveyor under the contract and termination of the contract when work is completed will not remove any liability from the Engineer/Surveyor as outlined above.

Monumentation Mapping shall be performed in accordance with the Right of Way & Monumentation Mapping Unit's guidelines/policies and pertinent provisions of the current Minimum Standards for Surveying in New Mexico.

Upon assignment of a ROW map date by the Lands Engineering Section Manager and confirmation on final acquisition of ROW, the Engineer/Surveyor shall prepare the monumentation maps.

Field staking of right-of-way limits as defined by the final ROW Maps and ROW Certification and recordation of the final ROW Monumentation Map(s) will be required. Field staking in accordance with approved final Monumentation Maps shall not occur prior to the issuance of the Right of Way Certification letter by the Right of Way Bureau and completion of construction. The final monumentation maps shall meet the Department's Monumentation Mapping Unit guidelines/policies and pertinent provisions of the current Minimum Standards for Surveying in New Mexico.

The Engineer/Surveyor shall submit the person-hour and fee proposal for ROW & Monumentation Mapping efforts to the Project Development Engineer for review by the Survey and Lands Engineering staff.

e. Deliverables

Provide final right-of-way mapping and title reports such that the Department may acquire the required right-of-way, if applicable. Submit one (1) unbound (full size) original set of the final accepted right-of-way maps to the NMDOT in addition to electronic submission as described in the in the Electronic Submittal of Design Data by Engineer/Surveyor. NMDOT standards and procedures are available upon request from the Lands Engineering Section. See Right of Way Mapping Development Procedures Handbook for complete details on right-of-way mapping deliverable requirements.

8. National Pollutant Discharge Elimination System (NPDES)

a. Description

The Engineer shall prepare a final stabilization temporary erosion and sediment control plan in accordance with the requirements of the NMDOT NPDES handbook dated August 2012, or current edition. The completed plans shall include the final stabilization temporary erosion and sediment control measures in accordance with the NPDES requirements.

9. Preliminary and Final Drainage Reports

A preliminary drainage report will be developed as part of the Phase I-A/I-B study.

Delineated Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) shall be taken into account in the draft drainage report, and the selected consultant shall coordinate with the local or county floodplain administrator during the drainage analysis.

a. Description

The Engineer shall use the July 2018 Drainage Design Manual for methodologies in preparation of the Preliminary Drainage Report.

b. Deliverables

The Engineer shall provide one (1) electronic copy (.pdf format) of the draft Final Drainage Report to the NMDOT. After the NMDOT has reviewed and approved the document, the Engineer shall submit one (1) electronic copy (pdf) of the final report to the NMDOT.

10. Pavement Subgrade Soils Field Exploration and Laboratory Testing and Reports

a. Description

The Engineer shall provide field exploration and perform laboratory testing of base course and subgrade samples collected and provide test summaries in accordance with NMDOT Pavement Design Policy for testing frequency and consisting of the following:

Engineer will be required to provide field exploration and laboratory testing consisting of the following:

- Test locations for Interstates shall consist of the following:
 - ¼ mile intervals in northbound direction
 - ¼ mile intervals in southbound direction
 - ¼ mile intervals on northbound shoulders
 - ¼ mile intervals on southbound shoulders
 - Submit Boring Location Plan prior to field exploration.

- Test locations for two-lane roadway shall consist of the following:
 - ¼ mile intervals in eastbound direction
 - 1 mile intervals in opposing direction
 - 1 mile intervals on shoulders (where existing)
 - Submit Boring Location Plan prior to field exploration.

- Test locations at 50, 100, 150, 250 feet from existing bridge for approach and departures, both directions for four-lane roadways and two-lane roadways. Submit Boring Location Plan prior to field exploration.
 - Subgrade testing at intervals described above to depths of five feet below existing surfacing. SPT N-blow counts shall be required. Dynamic cone penetrometer (DCP) testing shall be required at each location to a depth of three (3) feet per ASTM D6951-03.
 - Thickness of existing HMA, base and other pavement strata where encountered.
 - NMDOT shall have access to HMA cores to view and inspect.
- Coordinate contract laboratory testing with NMDOT personnel (Rais Rizvi, NMDOT Pavement Management and Design Bureau, 505.467.6243).
- For purpose of proposal, estimate two (2) soil samples per location. Perform the following geotechnical laboratory tests on each sample according to applicable AASHTO standards including, but not limited to, the following:
 - Sieve Analysis (including Minus No. 200 Wash);
 - Atterberg Limits;
 - Moisture Content;
 - R-Value;
 - Resilient Modulus (AASHTO T307-Current) – Estimate two (2) Tests, Samples to be chosen by NMDOT.

At completion of subgrade laboratory testing, Engineer will provide results to Pavement Management and Design Bureau to review. At that time, an assessment will be made to require lime stabilization testing. **Samples will be held by Engineer until lime stabilization determination has been made.**

For purpose of this proposal, provide cost estimate for stabilization testing services. Perform the following geotechnical laboratory tests on each sample to be tested for lime stabilization according to applicable AASHTO standards including, but not limited to, the following:

- Lime stabilization testing
 - Eades and Grimes (ASTM D 6276)
 - Lime content of 3, 5, 7%
 - Sulfate content (AASHTO T290) – estimate ten (10) samples
 - R-value on stabilized sample – estimate three (3) tests
 - Compressive Strength on stabilized sample – estimate three (3) tests

b. Deliverables

The Engineer shall provide one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the draft Pavement Subgrade Report to the NMDOT. After the NMDOT has reviewed and approved the document, the Engineer shall submit two (2) bound hardcopies and one (1) electronic copy (.pdf format) of the final reports to the NMDOT.

11. Geotechnical and Foundation Reports

a. Description

The Engineer shall generate the geotechnical scoping report (Phase I-A/I-B), preliminary and final geotechnical reports and preliminary and final foundation reports (Phase I-D and Phase II) to meet the needs of this project. At a minimum, the Engineer shall perform the tasks outlined in Chapter 610 of the NMDOT Design Manual. The reports shall include a detailed discussion of the site and recommendations for design and construction that include the items listed in Chapter 610 of the NMDOT Design Manual.

b. Geotechnical Investigation

Geotechnical Field investigation activities consisting of soil borings and/or rock coring performed during preliminary and final design phases maybe completed by the NMDOT, depending on the design schedule. If the NMDOT Geotechnical Field Exploration Unit completes the drilling, the Engineer shall provide a field geologist to meet with prior to the investigation to layout the boring locations, log the soils and rock samples, determine sample types and frequency, complete the laboratory testing and generate the boring log summaries. If the NMDOT Geotechnical Field Exploration Unit is unable to complete the investigation activities, the Engineer shall include a subtask in their proposal that accounts for all services necessary to complete the work.

Perform the geotechnical site characterization in accordance with the latest editions of the AASHTO LRFD Bridge Design Specifications, FHWA Geotechnical Engineering Circulars and the NMDOT Materials Geotechnical Manual and Chapter 600 of the NMDOT Design Manual. The Engineer shall develop the geotechnical investigation plan based on the recommended alignment of the Location/Alignment Study Report to develop recommendations for preliminary and final design. The investigation plan shall include the boring locations, frequency of sampling, depth of soil borings and rock cores, projected type and frequency of laboratory testing. Submit the investigation plan to the NMDOT Geotechnical Engineering/Exploration Section for review and approval at least two weeks prior to mobilization.

c. Deliverables

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) of the draft Geotechnical Scoping Report and the draft Preliminary Geotechnical and Foundation Reports to the NMDOT. After the NMDOT has reviewed and approved the documents, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final report to the NMDOT.

The Engineer shall provide one (1) hardcopy and one (1) electronic copy (.pdf format) of the draft Final Geotechnical Scoping Report and the draft Final Geotechnical and Foundation Reports to the NMDOT. After the NMDOT has reviewed and approved the document, the Engineer shall submit one (1) bound hardcopy and one (1) electronic copy (.pdf format) of the final reports to the NMDOT. A calculation packet shall accompany submission of all geotechnical deliverables.

12. Bridge Type Study and Bridge Design

A Bridge Type Study and existing Bridge Evaluation Study (BTS) shall be conducted for the bridges. This project is anticipated to require new bridges or to rehabilitate and widen the existing bridges. This particular bridge project may be a potential candidate for Accelerated Bridge Construction (ABC), which shall be discussed in the BTS. The BTS shall be coordinated with the Department and include a weighted decision matrix. The matrix shall include criteria for load rating, clearance, anticipated bridge life, impacts to traffic during construction and cost.

Other criteria may be added. The BTS report shall receive concurrence from the NMDOT Bridge Engineer.

The Department will review the preliminary bridge layouts in Phase I-D. The preliminary bridge layouts are required to ensure that serviceability requirements are met and that the proposed bridge is cost effective. The preliminary bridge layout for the bridge shall be approved for serviceability and cost effectiveness by the NMDOT State Bridge Engineer or his representative before final bridge design begins.

A preliminary cost estimate for the bridges shall be submitted with the preliminary bridge layout in Phase I-D. Costs will include user delay costs, traffic control costs and any other costs deemed necessary to properly compare ABC versus conventional bridge construction.

The preliminary layouts shall show the bridges in plan and elevation. The layouts shall include a typical section indicating the type and depth of the superstructure for the bridges. Expansion joint locations need to be indicated. Also, types and locations of major construction joints need to be identified, if applicable. The anticipated substructure types shall be shown. The overall bridge layout concept shall be indicated on the preliminary plans in Phase I-D. Both vertical and lateral clearances shall be indicated on the preliminary layouts.

Vertical clearance calculations shall be included with the bridge submittal.

Proposed bridge layouts shall be reviewed to determine and minimize future maintenance needs.

The bridges shall be designed for permit loads as stated in the Department's Bridge Procedures and Design Guide. An AASHTOWare Bridge Rating (BrR) model is required for the bridges after the bridge design alternative is accepted.

The Department's State Bridge Engineer must approve any change from the preliminary bridge layouts used in final design.

13. Sub-Surface Utility Engineering (SUE) and Coordination

The Subsurface Utility Engineering (SUE) process is used to identify the type, size and the ownership of existing underground and overhead utilities and establish their exact/precise location within the proposed project limits of NMDOT proposed construction projects. The SUE Quality Level B (Phase I-D design) can enable the accomplishment of preliminary engineering goals. Decisions regarding location of storm drainage systems, footers, foundations and other design features can be made successfully to avoid conflicts with existing utilities. Slight adjustments in design can produce substantial cost savings by eliminating utility relocations. The SUE Quality Level A (Phase II services), also known as “locating,” is the highest level of accuracy presently available and involves the full use of subsurface utility engineering services. QL-A provides information for the precise plan and profile mapping of underground utilities, and also provides type, size, condition, material and other characteristics of underground features. SUE services must adhere to 17NMAC 4.2, MAP-21, Buy America shall be provided by qualified, experienced SUE consultants, who must meet the minimum requirements/standards outlined below prior to providing services and utility certification ten (10) days prior to Plan, Specifications & Estimate (PS&E) meeting.

a) Research of Records and Utility Designating

The SUE provider shall coordinate with utility owners and others, as required, in researching/investigating records, including but not limited to utility “as-builts”, government/entity permit files, reviewing proposed Rese plans, contacting one-call centers, private utility owners, conducting field reviews, etc., so as to establish the location of existing and planned utilities. During this activity, the SUE provider shall also be required to ascertain the age and general condition of each utility facility.

For the purpose of the Contract, “designating” shall mean to provide accurate horizontal location of underground and overhead utilities by using geophysical equipment and techniques such as electromagnetic induction, resonant sonics, terrain conductivity meters, magnetics, radar devices and others. The type, size and ownership of each utility shall also be provided. The SUE Consultant shall also designate wells and septic systems.

While performing the designating activity, the SUE Consultant may excavate test holes, at no expense to the NMDOT, for the purpose of determining the approximate depth of the utility. Any markings on sidewalks or roadways for survey identification shall be of a temporary nature. The SUE Consultant shall provide the Engineer and the NMDOT with all data secured in hard copy plan sheet(s) as the 11 sheets in the plan set with cross sections in AutoCADD format and two flash drives to be provided to the NMDOT Utility Section.

b) Phase II Services (by negotiated contract amendment or by new RFP)

After completion of the designating phase, the SUE Consultant shall consult with the PDE, the Engineer and the NMDOT Utilities Section to discuss the findings, potential impacts and to establish the scope of additional SUE activities including, but not limited to, QL-A (locating), surveying, mapping, design analysis, and recommendations relative to impacts on existing and/or proposed utility systems on NMDOT projects may be added by amendment to the contract if necessary.

c) Traffic Control

The NMDOT will strictly enforce its Maintenance of Traffic policies and procedures. All work on New Mexico highways shall be performed in accordance with the following:

- Latest edition of the NMDOT Standard Specifications for Highway and Bridge Construction and associated supplemental specifications.
- Manual on Uniform Traffic Control Devices, (MUTCD), latest edition.

For the purpose of traffic control and possible lane closures, before initiating any field surveys or test pits, the SUE Consultant shall be required to obtain a permit from the NMDOT District One Traffic Engineer (DTE).

The SUE Consultant shall be required to submit a Traffic Control Plan (TCP), which must be approved by the DTE before the permit can be issued. The SUE Consultant shall be responsible for providing all labor, materials and equipment necessary for TCP at the SUE Consultant's expense.

The TCP shall include, but is not limited to: temporary traffic control signs, channeling devices, arrow panels, traffic barriers (i.e. attenuator barrels), impact attenuators, flaggers, temporary pavement markings, etc., and all other equipment and labor necessary to effectively implement the approved Traffic Control Plan.

d) Certification of Work

In all cases, the SUE Consultant must certify his/her work, and such certification shall include the signature and seal of a Professional Engineer and/or a Professional Licensed Surveyor, who is registered in the State of New Mexico.

e) Manpower

The SUE Consultant shall list four (4) key staff personnel. The key staff shall include:

- A Professional Engineer registered in the State of New Mexico with expertise in SUE;
- A Professional Land Surveyor registered in the State of New Mexico with expertise in surveying utilities;
- Qualified Geologist;
- Project Manager/Liaison.

The SUE Consultant shall provide all equipment, personnel and supplies required to perform the services listed in the Contract. The SUE Consultant shall obtain all necessary permits from city, county or other municipal jurisdictions, to allow the company to work in existing streets, roads and right-of-way for the purpose of marking, measuring and recording of existing utilities. The SUE Consultant shall notify Blue Stake or One Call prior to any fieldwork and shall be responsible for any fees incurred.

f) Equipment

The SUE Consultant shall list the quantity and different types of equipment that will be used for designating and locating services. This listing shall be in the technical proposal.

g) Professional Liability Coverage

The SUE Consultant shall have and maintain professional liability insurance that covers his subsurface utility operations and insurance for his professional services that will hold the NMDOT harmless for errors and omissions until construction of this project is complete.

h) Undersigned Sub-Consultant Services

The SUE Consultant shall list all sub-consultants that are expected to provide services under the Contract. The Contract shall also include a separate sum of money for undesignated sub-consultant services that may be required for unique circumstances.

i) Minimum Qualifications for SUE Consultants

In addition to the requirements outlined previously, the SUE firm selected to perform services for the NMDOT must also meet the following minimum standards.

- Demonstrate (list of projects and contacts) a thorough knowledge and understanding of designating, locating and data management activities. The SUE Consultant must have five years minimum experience as a SUE service provider.
- Individuals assigned by the SUE provider to carry out the work assignments must be well trained. The SUE Consultant must provide an on-going training program to the NMDOT prior to being pre-qualified and accepted as a SUE service provider by the NMDOT.
- Individuals assigned by the SUE provider to supervise daily operations on each crew must have a minimum of two years SUE crew experience.
- The Project Manager must have previous experience in the management of two or more SUE contracts, and must be available to commit sufficient time to the project.
- The SUE provider must demonstrate the capacity to pool resources and respond to the needs of the NMDOT in a timely manner.
- The SUE provider must have vacuum excavation or comparable non-destructive locating equipment capable of successfully completing the task, considering the soil conditions for the geographic region and/or the depth of existing utilities.

14. Environmental Investigations and Documentation

The environmental investigation and documentation process, subsequent circulation, and public/stakeholder meetings, shall be completed in accordance with the latest edition of the NMDOT Location Study Procedures:

A Guidebook for Alignment and Corridor Studies; FHWA Technical Advisory T 6640.8A, 23 CFR Part 771; and other applicable guidelines and regulations. Based on the scope of work outlined in this RFP, the level of effort for the Environmental Clearance will be determined based on project scope and the Engineer will complete the work necessary to obtain federal approval based on the determined level of effort for the project and in consultation with the NMDOT. The use of federal construction funds on this project requires adherence to federal and state law including, but not limited to, NEPA, which requires the identification and assessment of impacts associated with a proposed action, and mitigation of impacts if necessary.

The following are the minimum services to be provided by the Engineer:

- Environmental and Cultural Resource Investigations (Section 14.a)
- Agency Coordination and Public Involvement, including public meetings and a public hearing (as required) (Section 14.B)
- Public Involvement Plan. (Section 14.C)
- Preparation of a Categorical Exclusion (CE) and all supporting documentation or an Environmental Assessment (EA), if required. (Section 14.D)
- Preparation and distribution of a FONSI and FONSI Request if required (Section 14.F)
- Summary of all public involvement activities and Public Input Synopsis, including Transcript of Public Hearing, Public and Agency Comments, and Responses to Comments (Section 14.E)

a) Environmental and Cultural Resources Investigations

The environmental investigations must be conducted by an interdisciplinary team including qualified natural resource and cultural resource specialists. The environmental investigations will include, if appropriate, surveys and analyses in the following areas:

- Biological surveys conducted by qualified biologists including a biological evaluation report following the most current NMDOT Biological Report and Format Standards;

- Wetland determination and delineation including, if necessary, a Wetland Delineation Report for regulatory agency review and approval;
- If Section 401 certification and 404 permit(s) are required, a Pre-Construction Notification (PCN) application shall be prepared and submitted for review and approval.
- Section 4(f) determination and evaluation including, if necessary, an official 4(f) Determination Report for land management agency and FHWA review and approval including avoidance options, alternative evaluations and measures to minimize harm;
- A visual impact assessment including, if necessary, a separate Visual Impact Assessment Report for NMDOT review and approval;
- A cultural resource survey conducted by permitted archaeologists and historians including a report and all appropriate forms and attachments, following the guidelines set forth in 4.10.15 NMAC and the most current NMDOT Guidelines for Cultural Resource Investigations.
- A noise analysis including, if necessary, a separate Noise Analysis Report for NMDOT review and approval;
- An air quality analysis including, if necessary, a separate Air Quality Analysis Report for NMDOT review and approval;
- Other surveys, investigations, and analyses may be required as appropriate to the project.

Environmental investigations must include analyses of all issues mandated by NEPA as well as other state and federal environmental legislation, including Executive Orders on Wetlands, Floodplains, and Environmental Justice. The environmental investigations shall include evaluations of all appropriate alignment and typical section alternatives, including the no-build option and avoidance options. Environmental investigations will also include, as appropriate, measures to minimize harm, enhancement measures and measures to mitigate impacts.

The cultural resources survey and preparation of a final Cultural Resources Survey Report must meet all federal and state requirements.

A permitted archaeologist and historian must conduct the cultural resources survey. Cultural Resource investigations shall include Historic Building inventories and all attachments, following state guidelines delineated in 4.10.15 NMAC and federal guidelines as per the National Historic Preservation Act, Section 106.

All environmental reports submitted to the NMDOT are subject to NMDOT review and approval before investigations are accepted as complete. Based on engineering, cost, environmental and right-of-way impacts, the Engineer shall determine, recommend, and obtain NMDOT concurrence on the preferred alternative to be used for location approval in the environmental document and for final design. Errors or omissions not adequately corrected from the first review will be subject to liquidated damages that will be withheld from final payment of the Contract.

b) Agency Coordination

Agency coordination will include any agency with management responsibilities, all agencies with sensitive resource responsibilities and any agency that may have permit authority for project activities. The Engineer will determine and coordinate the environmental and cultural resource impacts and mitigation measures of the alternatives examined, including the consequences of the no-build alternative. The appropriate local, county, and state agencies, the public and other interested agencies will be contacted to ensure that the community and governmental concerns are identified and considered for inclusion in the design development of the project. The Engineer shall be responsible for all coordination that is required to provide a satisfactory Public Involvement Plan and environmental document.

c) Context Sensitive Public Involvement

It is anticipated that a medium level of public involvement will be required. This level of effort typically involves a couple of public information meetings, coordination with community stakeholders, agency coordination, and at least one public hearing (if required).

A Public Involvement Plan (PIP) consistent with Context-Sensitive Solution methods and practices must be submitted to the NMDOT Environmental Bureau prior to the first public information meeting.

The PIP is expected to be an evolving document and process, specific to the project (Phases I-A, I-B, and I-C). The PIP should contain goals of working with the community, analyses of the background context, modal considerations, opportunities to express local values and discussion of the design approach with specific consideration of the potential project issues, initial identification of the various stakeholders and their issues of concern, techniques for communicating with them, and possible methods for addressing concerns. The plan should follow the outline of the NMDOT Context Sensitive Public Involvement Plan for Location Study Projects.

At the end of Phase I-A/B, the PIP will be evaluated and updated as necessary to proceed into subsequent project phases. The PIP should include: a brief project description, planning history/background information, community profile, discussion of anticipated issues, known or likely impacts (positive and negative), objectives and goals (including approaches to resolution of issues), public outreach activities, agency coordination activities, coordination with elected officials & community representatives, and mailing list.

Engineer shall be responsible for the implementation and cost of all public meetings coordination including advertisement of the meetings, arrangement and cost for required recording equipment: news media coordination: providing and arranging for the meeting facilities; responding to agency and public comments; preparation of handouts, exhibits and displays; coordination of meetings; preparation of reports of all meetings and contacts; preparation of transcripts and summaries of public meetings; and any coordination with the general public, property owners, or agency involvement that may be required before or after the public meetings.

d) Environmental Document

A qualified environmental professional shall be responsible for preparation of the environmental document. The environmental document summarizes the environmental and cultural resources investigations, agency coordination, and public involvement. The effort must be commensurate with the potential for environmental impacts.

It is anticipated that a Categorical Exclusion (CE) will be the appropriate level of effort required. The environmental document shall be developed using the format outlined in FHWA Technical Advisory T6640.8A, 23 CFR Part 771 and other applicable guidelines and regulations. Submittal of an environmental document to the NMDOT, which is incomplete as determined by Environmental staff or the PDE, will not be reviewed. Submittal of an environmental document that is considered to be complete shall be reviewed once and comments made to the Engineer. A complete environmental document shall have a comprehensive discussion of purpose and need, alternatives (as appropriate), environmental investigations, assessment of impacts, and appropriate mitigation as necessary.

e) Input Synopsis

The public involvement summary or Input Synopsis shall be submitted to the NMDOT Environmental Program Manager. The Input Synopsis shall contain copies of the public involvement handouts and written comments, environmental document circulation list, responses to verbal and written comments, and the public involvement summary and meeting transcript.

f) Environmental Follow-Up

During Phase II – Final Design, the Engineer will complete the environmental investigation documentation process to re-evaluate the NEPA Document and update as needed, including subsequent circulation.

The following are the minimum services to be provided by the Engineer as needed:

- Preparation of a FONSI re-evaluation
- Supplemental Public/Agency Coordination
- FONSI Request

The environmental document summarizes the environmental investigations, agency coordination, and public involvement. The effort must be commensurate with the potential for environmental impacts. It is anticipated that a re-evaluation of the FONSI will be the appropriate level of effort required. Should environmental re-evaluation investigations be necessary, all requirements of Environmental Investigations and Documentation of this RFP will be followed.

If significant design changes have occurred or significant time has elapsed since the issuance of the FONSI, a contract amendment will be undertaken and the appropriate environmental level of effort will be negotiated.

15. Coordination

The Engineer will be responsible for all coordination necessary to accomplish the work required by the contract. This responsibility shall include coordination with all property owners and federal, state, city, county, schools and other agencies or stakeholders having jurisdiction or interest in the project. This will include obtaining approvals and/or concurrence on all work that is to be completed by the Engineer including work completed by sub-contractors working under this contract. For any required formal (written) approvals, the Engineer will provide the Department with all required data and draft letters of transmittal. The Engineer shall also be responsible for documentation of all coordination efforts and, as required, providing project status presentations to NMDOT management, local government, or other stakeholders.

Contact with the public will be conducted during the design process of this project by interviewing affected business and property owners in the project area. Each business and property owner will be contacted and a meeting will be scheduled for interviews. Property owner interviews shall be conducted in the field by arranging to meet with owners at their respective parcels. An overview of the project and the specifics on how the property owner's access, fencing, gates, drainage, etc., will be affected by the project are to be discussed.

In addition to the above, the Engineer shall be responsible for:

- Scheduling all design review meetings;
- Copying and the distribution of plans and documents;
- Writing design review reports (due within one week of the meeting);
- Providing design team meeting minutes (due within one week of the meeting);
- Documenting verbal approvals in writing in the monthly progress reports to the design team and NMDOT;
- Performing and documenting property owner interviews;

- Being the focal point for the flow of all project activity, including the sub-contractor work;
- Providing monthly progress reports for design, utility, environmental, right-of-way and construction.

a. Meetings

This work will include coordination with the Department's PDE in scheduling design review and other meetings.

b. Agency Coordination

Agency coordination will include any agency with management responsibilities, all agencies with sensitive resource responsibilities and any agency that may have permit authority for project activities. The appropriate local, county, and state agencies, the public and other interested agencies will be contacted to insure that the community and governmental concerns are identified and considered for inclusion in the design development of the project. It is anticipated that coordination with the agencies listed below will be required during the design and construction of this project:

- NMDOT
- Community of San Antonio
- Socorro County
- FHWA
- International Boundary and Water Commission (IBWC)

This list is for information only and not intended to be the final list of agencies to be contacted.

16. Quality Assurance/Quality Control Plan

A project specific Quality Assurance/Quality Control Plan is required for each phase of this project. The specific requirements are outlined in the current edition of the NMDOT Consultant Services Procedures Manual & Handbook.

17. NMDOT Shall Provide

The NMDOT will furnish the following to the Engineer. However, the NMDOT may choose to have the Engineer perform all or part of these services. In the event additional services are required from the Engineer to fulfill the overall intent of the scope of work, the NMDOT, at its discretion, may negotiate a fair and reasonable price with the selected consultant for those additional services.

This is not meant to negotiate additional work that may be interpreted as a stand-alone or separate project.

- A Project Development Engineer (PDE) from the NMDOT staff to serve as an engineering liaison for the project.
- Electronic copies of Bridge Inspection Reports and Bridge As-Built Drawings.
- Hazardous Material Investigations and Recommendations.
- NMDOT staff to provide utility coordination.
- 20-year Traffic Growth Projection.
- Available crash data.
- Equivalent Single Axle Loads (ESALs).
- Review of Soils Testing and Profile Reports
- Final pavement design.
- Review of Phase I-A/I-B Study Report and Preliminary, Pre-Final, Final and PS&E Design Plans, Estimate and Documents.
- Review of Production documents.
- Review of Preliminary and Final Geotechnical Reports and Recommendations.
- Review of right-of-way design and real estate services (if required).
- Verification of right-of-way mapping (if required).
- Review of all bridge and/or structural design.
- Review of Right-of-Way Maps, Title Reports and Monumentation Maps (if required).
- Review of environmental documentation and mitigation measures.
- Review of Preliminary and Final Drainage Reports

If there are any questions or inquiries in relation to this Addendum No.1, Offerors may contact Paul Gruber at (505) 469-0374 or by email at Paul.Gruber1@state.nm.us.