DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

1. Project Description
The work of this project includes the design and installation of new 138 kV transmission power lines, installation of communication and security fiber optic lines, access road, and demolition of existing transmission power lines and poles tie into existing system.

More specifically, the project shall replace existing fiber optic (F/O) communication cabling route with the 138 kV transmission line. The communication cabling shall include 144 strands of single mode fiber optic cable and compatible with wavelength equipment. The new 138 kV transmission line will be designed to be ±100 feet, parallel to the existing 138 kV transmission line, where possible. The design of the structures shall be similar to the structures used for the Hill 200 Project. The 138 kV PTSR project shall be managed to meet environmental, safety, and health hazards requirements through documented and approved analysis of work scope and practices as required. Steps will need to be taken to develop an appropriate Avian Protection Plan to protect migrating and predatory birds. The project at Nevada National Security Site (NNSS) shall ensure the conservation and protection of biological resources in accordance with the site's controlling procedure, CD-P420.001, Conservation and Protection of Biological Resources. Protection of cultural resources must be accomplished in accordance with site procedure CD- P420.002, Protection of Cultural Resources.

1.1 Background
The NNSS safely conducts high-hazard operations, testing, and training in support of National Nuclear Security Administration (NNSA), the U.S. Department of Energy (DOE), the U.S. Department of Defense, and other agencies. The NNSS helps ensure the security of the United States and its allies by supporting the stewardship of the nuclear deterrent, providing emergency response capability, and training, and contributing to key non-proliferation and armscontrol initiatives. Its immense size (over 1,360 square miles) and remote location needs a reliable, robust, and dependable utility infrastructure (power, roads, information technology, water, etc.) to support mission requirements.

The NNSS Enterprise Risk Management system has identified aging infrastructure as the highest risk at the site. Specific risks have been further evaluated based on existing and projected deficiencies across the mission critical nuclear and high-hazard facilities and supporting infrastructure. The vulnerability of the existing degraded 138 kV Site Power System (SPS) has been evaluated as one of the highest specific site risks. Further, the current NNSS communications network is composed of obsolete copper wire-based technology. Closing the

capability gap on achieving highly reliable power and communications to NNSA mission-critical facilities drives the mission need for this project. This project will ensure the reliable capability for electrical power and distribution of vital communications across the NNSS such that the mission-critical experimental and support facilities can meet their DOE and NNSA objectives of sustaining the safety, reliability, and performance of the nuclear stockpile.

The Mission Need for this project is to restore reliability for the power distribution system. The existing NNSS 138 kV Power Transmission System (PTS), which was originally constructed about 1963, provides primary transmission and secondary power distribution to various complexes, facilities, buildings, and other infrastructure site-wide through a loop configuration. The existing capacity of the PTS is adequate to support both ongoing and anticipated future mission work. However, the system is aging and experiencing degradation due to the harsh desert environment of the NNSS and requires replacement to provide reliable power to nationally important nuclear facilities. The 138 kV PTSR also carries the site's fiber optic (F/O) backbone and the F/O cable that supports the site's Supervisory Control and Data Acquisition (SCADA) system. Replacement of the PTS offers the opportunity to also upgrade the site's communication system by installing new higher- capacity F/O cable co-located with the new transmission conductors. The NNSS needs reliable electrical power and distribution of vital communications across the site such that the mission critical experimental and support facilities can meet their NNSA and other national security agency mission objectives of sustaining the safety, reliability, and performance of the nuclear stockpile.

1.2 Pre-Conceptual Engineering Documents for Reference

Preliminary design documents have been prepared to support Critical Decision -1 (CD-1) assessment and approval, demonstrating technical feasibility and constructability for the project.

The following preliminary engineering documents are available and or provided to the Contractor for reference:

1.2.1 Design Plans

The "preliminary" design plans (estimated at 15-30% complete) were generated for the 138 kV PTSR project under Mission Support Test Services (MSTS) by Burns and McDonald dated 1/19/2018.

These plans are included with this contract for reference and as a general guide for the Designer of Record (DOR) in their preparation of a complete design. The final design drawings prepared using computer aided design & drafting (CADD) shall be inaccordance with this contract.

1.2.2 Specifications

The limited selection of "preliminary" technical specifications are included with this contract that were prepared with the "preliminary" design documents under MSTS by Burns and McDonald. These specifications are included for reference and general guidance and are not considered final for this Project. It is the responsibility of the DOR to prepare a complete set of technical specifications specific for the 138 kV PTSR project. The final technical specifications shall be prepared in accordance with the requirements of this contract.

1.2.3 Basis of Design

The preliminary Basis of Design (BOD) document is included with this contract that was prepared with the preliminary design plans and specification under MSTS by Burns and McDonald. It is the responsibility of the DOR to prepare and finalize a Basis of Design specific to their design for the 138 kV PTSR Project. The BOD shall be submitted to the Government with each design submittal package indicated in this SOW.

1.2.4 Electronic Files

Other electronic files may be available for use in preparing the design documents that are the responsibility of the DOR to review and reference as necessary. It is the Contractor's obligation to ensure that the electronic files considered, used and referenced as part of this project are accurate, correct and appropriate for the design of the 138 kV PTSR Project.

DOR shall review and consider the following documents in preparing the 138 kV PTSR project:

- NNSS 138-kV Pre-Conceptual Design Submittal
- NNSS 138-kV Line Replacement Pre-Conceptual Design Report
- NNSS 138-kV PTSR Pre-Conceptual Design Specification Sections BM-6000, SPC-E01 thru SPC- E10
- 20180412_ExitBrief_138kV_IPR_CD-1 Technical Slides
- 20180319_LOIs_138kV_CD1_IPR_Draft ACD (Consolidated NFO Comments)
- PPEP-0400.001, Preliminary Project Execution Plan for PTSR Project

1.2.5 NNSA Reference Documents

The Contractor is responsible for obtaining, reviewing and using the appropriate and necessary NNSA and DOE Orders/Guidelines in preparing the 138 kV PTSR project design, performing construction activities and managing the project. The following lists some of the expected documents that will/may relate to the project include but are not limited to this list:

1. DID-ENG-0004, Conceptual Design Report

2. DID-ENG-0011, Feasibility Study
3. DID-ENG-0018, Technology Readiness Assessment
4. DID-PM-0018, Risk Management Plan
5. DID-PM-0003, Configuration Management Plan
6. DID-PM-0025, Nuclear Quality Assurance Program Plan
7. DID-PM-0031, Quality Assurance Plan
8. DID-PRG-0003, Key Performance Parameters
9. DID-PRG-0006, Performance Baseline
10. DID-SAF-0001, Conceptual Safety Design Report
11. DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets
12. DOE G 413.3-21A, Cost Estimating Guide
13. OP-ENGR-009, Engineering Design Process
14. 10 CFR Part 851 Appendix A, Section 1(a)1
15. 10 CFR Part 851 Appendix A, Section 1(d)
16. Bulletin 1724E-200 Design Manual for High Voltage Transmission Lines (Latest Edition)
17. United States National CAD Standard® (NCS).
18. Uniform Drawing System (UDS)
19. NNSA Business Operations Procedure (BOP)

a. BOP 413.1 Admin Chg. 1, Value Management (VM)
b. BOP 413.2 Admin Chg. 1 Program Requirements Document for Construction Projects
c. BOP 413.3 Independent Cost Estimates Procedure
d. BOP 413.7 Project Management for the Acquisition of Capital Assets
e. BOP 413.8 Energy Systems Acquisition Advisory Board Equivalent (ESAAB-E)

Process BOPs are located and available to the contractor at the following link. CO will provide access to the contractor upon request:

https://directives.nnsa.doe.gov/nnsa-directives-browse#c10=&b_start=0&c4=Business+Operating+Procedure+(BOP)&c1=Office+of+Enterprise+Project+Management

2. Progress/Compliance

2.1 Project Management, Planning, and Reporting Services

The Contractor shall conduct project planning activities, including the development, implementation, and maintenance of project schedules, events, status of resources, report(s) on the activities, and progress toward accomplishing project objectives more specifically identified in the subparagraphs below. The Contractor shall prepare and submit the following reports, at minimum, to the Government to monitor progress and ensure compliance:

- Weekly Meetings
- Monthly Progress Report

- Project Management Team (PMT) Meetings
- Program Reviews
- Outlines and Drafts

The various reports shall be submitted to the Government for review and acceptance for content and layout. Contractor generated reports and meeting requirements will be dynamic and change in level of content depending on project activities and construction cycle. Any Contractor errors or omissions to the report that require changes and/or amendments will be at no cost to the Government.

2.2 Schedule and Planning Requirements

The Contractor shall create and maintain a Critical Path Method (CPM) schedule in accordance with general condition requirements of this contract.

2.2.1 Work Breakdown Structure (WBS) Requirements

The contractor shall prepare and submit a WBS as specified in this contract for Government for approval. The WBS shall be submitted for review prior to the Initial Project Kickoff meeting. The WBS shall be consistent across the project work elements including design, construction, invoicing, price-loaded schedule of values and schedule activities. All tasks and work activities required under this contract shall be included in the WBS. The Contractor shall include and maintain a WBS dictionary describing each component of the WBS with milestones, deliverables, activities, scope, and sometimes dates, resources, and quality.

2.3 Self-Certification

The Contractor shall develop and implement a self-certification, verification and validation process to confirm to the Government that the technical contract requirements and responsibilities have been met. Technical submittals including supporting documents shall be checked and certified by appropriately qualified person(s) before the documents are submitted to the Government.

2.4 Meeting and Charrette Services

2.4.1 Site Visits

The Contractor shall coordinate and support all its sub-tier contractors' on-site visits related to the project to conduct reviews, inspections of the site and infrastructure, and or to verify project requirements.

2.4.2 Design Review Meetings

The Contractor shall coordinate and conduct Design Review meetings for the [60%, and 90%] design submittals with the Government. The Contractor shall ensure that all appropriate engineering/design/construction personnel attend these reviews. Review

conference and meetings shall include project managers, DOR, discipline leads, quality control, scheduling, construction PM, NNSS operations managers/leads and safety personnel.
Review meetings will be the responsibility of the contractor to host; announcing and publishing location, date(s) and time with a minimum of 30 calendar days prior to the meeting date. The table below provides guidance as to approximately when design review conferences and meeting shall occur.

Deliverable	Time
NTP	
Preliminary Design (60%) Submittal	NTP + 36 weeks
NNSA Preliminary Design (60%) Review	3-week review
Preliminary Design Review (60%) Onsite Meeting	NTP + 39 weeks (1-week duration)
Design Development (90%) Submittal	NTP + 47 weeks
NNSA Design Development (90%) Submittal Review	1-week review
Design Development (90%) Onsite Meeting	NTP + 49 weeks (1-week duration)
Final A/E Design Documents Submittal	NTP + 52 weeks
Submit Issue for Construction	

2.4.3 Travel

Review conferences / meetings will be held at or near the NNSS site in North Las Vegas, Nevada. Review Meetings are tentatively planned to be 5 days with travel and visitor badging conducted on Mondays. Departures should be planned for Friday's after 12 PM (noon) PST).

3. Project Scope Work

3.1 General Scope of Work Services

The Design-Build Contractor work is defined as all services, labor, materials, equipment, supervision and other efforts to be provided and performed by the Contractor including, but not limited to, the following general categories:

3.1.1 Prepare and update documents per CD -2/3 requirements of DOE O 413.3B

3.1.2 Provide Design Engineering Services.

3.1.3 Coordinate with project stakeholder the most practical alignment meeting project and stakeholder requirements.

3.1.4 Provide engineering economic analysis, cost estimates and value engineer with project stakeholders.

3.1.5 Incorporate Geotechnical challenges and considerations including any necessary environmental licensing, impact mitigation, and ROW considerations in determining route selection of design facilities / transmission lines.

3.1.6 Provide Scheduling
3.1.7 Provide environmental studies as necessary for compliance with site environment compliance documents and impact mitigation.
3.1.8 Provide environmental mitigation.
3.1.9 Provide surveying and mapping necessary for design and construction.
3.1.10 Prepare and obtain any permits required from Federal, State, and Local agencies having jurisdiction within the project boundaries or otherwise needed.
3.1.11 Provide design and technical specifications for the project.
3.1.12 Prove for removal of hazardous materials.
3.1.13 Prepare and provide design construction drawings and plans including tie in to existing system and facilities.
3.1.14 Provide design services during construction including submittal and RFI review.
3.1.15 Provide all construction activities necessary to complete the contract.
3.1.16 Provide quality inspection and testing
3.1.17 Provide verification and validation
3.1.18 Provide construction safety and security
3.1.19 Maintain Red Line Drawings of actual field construction conditions and installation
3.1.20 Prepare CADD As-built Construction Drawing based on redline drawing of actual field construction conditions.
3.1.21 Provide design and technical specifications for a new replacement fiber optic cable and SCADA systems to be installed on the new steel poles included all design tie-in to existing systems and or facilities.
3.1.22 Provide coordination, testing, commissioning and turn-over of all new installed systems complete and operating.
3.1.23 Provide and implement Traffic Plans as necessary to support construction activities.
3.1.24 Provide design, technical specifications and coordination associated with traffic plan including road closures/detours related to construction.
3.1.25 Provided design and construction of permanent improvements necessary as part of right-of-way, including but not limited to improvements related to maintenance of access.
3.1.26 Contractor shall ensure positive drainage for all improvements
3.1.27 Comply with site controlling documents including but not limited to Health Safety, Environmental, Biological, Cultural Historical Regulatory, and local governing site documents.
3.1.28 Implementation of Contractor's warranty for the Project after construction completion
3.1.29 Coordination with jurisdictional authorities (governments, public, and private entities)
3.1.30 Other efforts necessary or appropriate to complete the design and construction of the project, and to ensure the project achieves the key performance parameters, supporting NNSS site operations, especially in the Mission Corridor.
3.1.31 Prepare CD–4 documents per requirements of DOE O 413.3B
The Contractor shall provide design and construction for the installation of the new 138

kV power transmission line, installation of communication and security fiber optic lines, access road and demolition of existing transmission power lines and poles complete in place tie in of new system to the transmission system. The Contractor shall be responsible for establishing and controlling the plan and profile of the transmission line alignment. The Contractor shall identify, design, install, and maintain a temporary protective layer over operating utilities to protect the utility from degradation or damage through the construction period.

3.2 Services and Requirements

The Contractor shall provide Design-Build services for the 138 kV PTSR Project meeting the requirements for the key performance parameters and satisfying CD-4 of DOE O 413.3B achieving an operational system in its entirety at the National Nuclear Security Site (NNSS), Mercury, Nevada.

The Contractor is responsible for reviewing the Basis of Design documents, "Preliminary" Engineering Drawings, Technical Specifications, and other CD-1 documents for the preparation and completion of the 138 kV PTSR Project design and construction.

3.2.1 Location of Services

The location for the services shall be at the National Nuclear Security Site (NNSS),Mercury, Nevada.

3.2.2 Period of Performance

The work shall proceed after the issuance of the Notice to Proceed (NTP) by the Government. Period of performance shall be as follows:

941 calendar days for design, construction and all phases of project requirements CD-2 through CD-4

3.2.3 Codes and Standards

The Contractor shall review and analyze current design, industry and regulatory design, construction code, requirements for applicability to this design and construction project. The Contractor shall comply with all applicable (1) federal, state, and local environmental statutes, instructions, manuals, handbooks, regulations, guidance, policy letters, and rules (including all changes and amendments), and (2) Presidential Executive Orders, in effect on the date of issuance of this contract. Location- specific documents required in support to carry out this contract will be provided by NNSA.

3.2.3.1 Design Drawing Layer Naming Convention

The Contractor shall incorporate and use a layer naming convention. If a NNSA layer naming conventions is not available, the DOR shall use the American

Institute of Architects (AIA) CAD Layer Guidelines and or the latest version of the United States National CAD Standard® (NCS) for developing the layer naming conventions.

3.2.3.2 Organization, Drafting Conventions, Symbols Convention

The DOR shall incorporate and use drawing conventions. If an approved convention is not available, the Contractor shall us the Uniform Drawing System (UDS) for standardizing computer-aided-drafting design (CADD) services. The designer must adhere to the requirements established to ensure consistence in organizing and managing the design drawings across the disciplines and drawings.

3.2.4 Interface Coordination and Design Integration

The Contractor shall be responsible for coordinating the interfaces and performing design integration with adjacent utilities, systems, site operations, and the Government.

3.2.5 CD-2/3 and CD-4 Document Preparation Requirements

The Contractor shall prepare and update the requirements listed in the table below in accordance with DOE O 413.3B Appendix A Tables 2.2 CD -2 Requirements, Table 2.3 CD-3 Requirements and Table 2.4 CD-4 Requirements. Items indicated in the sections "Post CD-2 Approval" "Post CD-3 Approval" and "Post CD-4" of Table 2.2, Table 2.3 and Table 2.4 respectively are INCLUDED in this SOW.

Submissions shall be in accordance with the progress submittals commencing after receipt of Notice to Proceed. Each document shall be included in the CPM schedule developed as part of the overall Contractor's schedule. Documents shall be included in the Contractor's CPM and have a FINAL (milestone) deliverable dates as noted below until there is a mutually agreed to CPM schedule. The Contractor shall follow and update the referenced PEP POAM for CD-2/3 and CD-4 throughout the design and construction of the 138 kV PTSR Project.

CD-2/3 REQUIREMENTS FOR 138 kV PTSR PROJECT (LINE ITEM PROJECT)

Deliverable	Completion Date (NLT)
Quality Management Plan Update	NTP + 36 weeks
Construction Project Hazard Analysis	NTP + 36 weeks
Commissioning Plan Update	NTP + 36 weeks
Construction Test and Inspection Plan Permitting Requirement Document	NTP + 36 weeks
Waste Management Plan	NTP + 36 weeks
Hazard Analysis Report	NTP + 36 weeks
Transition to Operations Plan	NTP + 36 weeks
Operations & Maintenance Training Plan WBS Dictionary and Basis of Estimate Update	NTP + 36 weeks
Baseline Estimate	NTP + 36 weeks
Baseline Schedule	NTP + 36 weeks
Project Controls Plan	NTP + 36 weeks
Review Quality Assurance Program	NTP + 36 weeks
Keep PDS Current	NTP + 36 weeks
Project Execution Plan	NTP + 49 weeks
Acquisition Strategy Update	NTP + 49 weeks
Risk Management Plan Update	NTP + 49 weeks
Risk Assessment Report Update	NTP + 49 weeks
Risk Register Update	NTP + 49 weeks
Perform IPR to validate PB	NTP + 49 weeks
Update ICE/ICR for CD-2/3 Readiness	NTP + 49 weeks
Procurement Subcontracting Plan	NTP + 49 weeks
Complete NEPA	NTP + 49 weeks
Establish a Performance Baseline	NTP + 49 weeks
Ensure compliant EVMS	NTP + 49 weeks
Lessons Learned regarding up-front project planning and design. Lessons learned, and best practices will be captured throughout the project.	NTP + 10 weeks
At the completion of the project, a final lessons learned report will be prepared, distributed, and placed in the project records within 60 days of CD 4 approval. The report will be a compilation of the lessons learned issued during the project.	CD4 Approval + 8 Weeks

After completing CD 2/3 the Contractor shall conduct the following:

1. Submit all CD documents, and if there are changes to the PB, submit BCP documents to PM.
2. Continue monthly PARS II reporting (excluding earned value data).
3. Continue Monthly Project Review (MPR) with the PME or their designee.
   a. The contractor may provide an abridged MPR briefing template in the proposal

or state the standard NNSA APM template will be sued for the MPR updates

4. Within 60 days, submit Lessons Learned regarding up-front project planning and design to PSO and PM.

CD-4 REQUIREMENTS FOR 138 kV PTSR PROJECT (LINE ITEM PROJECT)

Deliverable	Completion Date (NLT)
Issue a Project Transition to Operations Plan	NTP + 100 weeks
Readiness to Operate Assessment	NTP + 100 weeks
Final Commission Plan	NTP + 100 weeks
Final Hazard Analysis Report	NTP + 100 weeks
Environmental Management System (DOE O436.1, as appropriate	NTP + 100 weeks
Post CD-4 Approval:	09/2023
Lessons Learned regarding project execution and facility start-up	CD4 approval + 8 weeks
Initial Project Closeout Report	CD4 approval + 8 weeks 12/2023

The Contractor shall submit the required documents for CD 2/3 and 4 in accordance with the above description. The Government will provide the appropriate reviews within 30 days of receipt of the appropriate documents and provide back to the contractor a consolidated, de-conflicted set of comments.

3.2.6 Site Design Data

The Contractor shall perform all necessary field reconnaissance, surveys, and site investigations required to obtain engineering information and design data for the accomplishment of the contract documents of the project in accordance with requirements of this SOW.

3.2.7 Field Measurements

The Contractor shall make its own field investigations to verify dimensions and other information shown on Government furnished reference drawings. The Contractor is responsible for the accuracy of all field measurements necessary for the completion of this contract.

3.2.8 Environmental, Biological and Other Documents

Before completing project required reports and construction drawings, the Contractor shall review and ensure compliance with all regulatory requirements, including but not limited to NEPA, environmental, biological, State Historical Preservations Office (SHIPO), EIS, and NNSS governing documents. Compliance shall be demonstrated through preparation of compliance reports, to be submitted with each design deliverables and monthly during construction activities. The Contractor is responsible for coordinating and preparing all required environmental documents and meeting environmental regulations. The Contractor is responsible for coordinating, completing and obtaining

permit related to the construction of the Project.

3.2.9 Material Surveying and Sampling

All survey(s) and sampling activities shall comply with all applicable Federal, State, and local laws, regulations, codes and procedures. If applicable, the Contractor shall document type and quantities of hazardous materials present on Site. Information gathered from the hazardous materials survey(s) will be incorporated into the design for purposes of potential demolition activities. If hazardous materials are present, the Contractor shall prepare a Hazardous Materials Report to be provided with the Preliminary Design Submittal documents. The Contractor shall coordinate with the appropriate entities when desert tortoises are being encountered.

3.2.10 Field Surveying and Topographic Mapping

The Contractor shall provide all field surveying and topographic mapping necessary to prepare the final design documents. The Contractor shall provide all necessary field surveying necessary for construction. Any available photogrammetric data used for preparing the "preliminary" design documents is for the Contractor's reference. The Contractor is responsible for the accuracy of data acquired and used in the design and construction of the project.

3.2.11 Geotechnical

The Contractor shall review available geotechnical data available. However, the Contractor is responsible for obtaining any additional geotechnical data necessary to prepare the final design documents. The geotechnical data used for design shall be indicated in the basis of design document and submitted with the design submittals. The Contractor is responsible for the accuracy of geotechnical data acquired and used in the design and construction of the project.

3.2.12 Structures Reports

The Contractor shall review available structural reports and design data available. The Contractor shall prepare a Structures Reports providing the basis for the design of 138 kV PTSR structural elements. The Contractor shall also include a Pole Selection Report for each different pole. The Pole Selection Report will be subject to Government review and acceptance. The Governments review period for the Pole Selection Report is ten (10) working days.

3.3 Design

The Contractor shall provide the design for the 138 kV PTSR project using licensed professional engineers and designers in accordance with State and Government rules and regulations. All areas of design shall be under the supervision of Professional Registered Engineer. Design shall be based on new materials. The contractor's design shall make all efforts to use commercial off the shelf goods and materials. One-of-a-kind or long-lead items shall be identified during the design process prior to the 60% design review submittal such thatthe overall construction schedule is not increased. The DOR for each discipline, including

geotechnical, civil, landscape, structural, mechanical, electrical, and commissioning shall be identified and accounted for on the record drawings. Each respective DOR shall stamp, sign, and date each design drawing under their responsible discipline in accordance with Government and State rules and regulations on the Final/Issue for Construction design documents.

3.3.1 Design Criteria

The Contractor shall review the conceptual design report for design criteria that is contained in Nevada National Security Site (NNSS) 138 kV Transmission Line Replacement – Mission Corridor Conceptual Design Report 03/26/18. The DOR shall use the existing criteria to determine applicability of each criterion for preparing and updating the design criteria and Basis of Design as necessary to ensure the latest code of record and design criteria are utilized in the design of this project. The Contractor shall prepare and submit the design criteria used as the basis for design and construction of the 138 kV PTSR project.

3.3.2 CD-1 Documentation and Reports

CD-1 documentation and reports are available for the Contractor's reference and usage. The Contractor shall review CD-1 documents to confirm technical feasibility and constructability related to their own design development and construction. The Contractor shall prepare the Construction Drawings, Technical Specifications and Reports necessary to complete the 138 kV PSTR Project.

The Contractor shall review CD-1 specifications documents and determine applicability of each specification section, to Contractor's final design and construction methods, and determine what additional technical specifications are required.

3.3.3 Technical Specifications

The Contractor's registered professional engineers and DOR shall prepare the technical specification for the 138 kV PTSR Project. The DOR shall be responsible for the compatibility of the design to the planned construction and compliance with the contract provisions. The construction technical specifications shall be prepared in accordance with latest Construction Specifications Institute
(CSI) MasterFormat and SectionFormat. The DOR shall remove all unnecessary and non-project related information from the technical specification.

The technical specification shall identify submission requirement, such as shop drawings, product data, samples, installer qualification statements, manufacturer's instructions, source and field and quality control submittals necessary prior to commencing construction activities.

The use of "or equal" Clauses for products or materials identified in the technical specifications are allowable to set an acceptable standard, or by specifying by brand or manufacturer's name, followed by the phrase "or equal." When using the "or equal" phrase, more than one acceptable brand or manufacturer's name shall be identified, and the specifications shall state, "Product brand is for informational purposes only and shall

not be construed as the only product available." Also, the salient features shall be described. The Designer shall provide the documentation upon which the design was based with the design analysis. It is the DOR responsibility to ensure the product identified as "or equal" are truly equal across all technical requirements of the product. The Contractor shall develop a 138 kV PSTR Submittal Log identifying all submittals required in the project technical specifications and by the SOW. The Submittal Log shall indicate whether the submittals are to be submitted to the Government for "Review", "Information Only", or "Self- Certification". The Submittal Log shall be submitted to the Government with each Design Submission Review and with Monthly Reports during construction.

The Contractor shall prepare construction submittals, including shop drawings, in accordance with of this Scope of Work.
The Contractor shall submit submittals timely, allowing 21 calendar days for review, acceptance and return of submittal documents. Submittals not submitted timely for Government review will be at the risk of the Contractor. The Government is not responsible for delays caused by untimely submissions of submittals.

3.3.4 Value Engineering

Contractor shall initiate, conduct, complete, and implement Value Engineering. Value Engineering shall be completed prior to the 60% preliminary design submittal. The Contractor shall document the value engineering process, methodologies, and procedures. Additional Contractor-initiated value engineering opportunities can be introduced, conducted, and implemented through final design and construction efforts.

3.3.5 Demolition

The Contractor shall prepare a Demolition Plan as part of the design documents. The demolition plan, design and technical specifications shall provide for the demolition of the utility system including the demolition sequence of the utility system. The demolition plan and design shall require removal of buried poles to a depth of 2-4 feet below existing finished grade. The design and technical specifications shall account for any material removed as part ofthe demolition that is not salvageable and shall be removed in accordance with Federal, State, and local site rules and regulations at no cost to the Government.

3.3.6 Recycle and Disposal of Material

The Contractor shall identify salvage and recycle materials and equipment removed/demolished to minimize waste as part of this contract. With the exception of materials specifically indicated or specified to be salvaged or turned over to the Government, all refuse, excess or waste materials resulting from construction operations

shall be the responsibility of the Contractor and shall be recycled and/or disposed of in accordance with Federal, State, and local site rules and regulations.
All disposals shall be done in accordance with Federal, State, and local laws, rules,regulations, and requirements at no cost to the Government.

3.3.7 Clearing and Grubbing

The Contractor shall clear and grub the site as necessary. The clearing and grubbing plan and technical specifications shall ensure work is not performed outside the limits of the right-of-way or designated work area or utility easements, minimizing disturbance to natural ground cover.
The design and technical specifications shall include ground restoration requirements.

3.3.8 Access Roads

The Contractor shall design, construct, and maintain temporary access roads for its needs and those that may be required by local jurisdictions and emergency response authorities. The Contractor shall also design, construct, and maintain new permanent access roads required by the project. The Contractor shall coordinate with the local jurisdictions for the location of permanent access roads. Permanent access and maintenance roads shall be able to carry maintenance and emergency vehicles.
The design criteria shall be based on site requirements, location and anticipated vehicle usage.
The Contractor shall coordinate design and construction with appropriate site personnel and local agencies having jurisdiction. Additional permanent access roads may be required by emergency response authorities.

3.3.9 Drainage

The Contractor shall prepare design drawings and technical specifications to construct and maintain temporary drainage associated with and a result of this project. The Contractor shall design and construct all permanent drainage systems, such as drainage laterals, to ensure the successful drainage of the project. The drainage shall meet requirements of Federal, State, and local jurisdictions rules, regulations, and requirements. The Contractor shall coordinate the design and construction with the local jurisdictions for all drainage.

3.3.10 Utilities

The Contractor shall ensure that existing and planned future utilities are not in conflict with the design and construction of the 138 kV PTSR project. The Contractor shall relocate and/or protect existing utilities in accordance with the requirements of the local agencies having jurisdictions of the in-situ utility and this contract. The Contractor shall coordinate with local jurisdictions and the utility owners throughout the project. The Contractor shall prepare the necessary designs and construct those utilities in conflict with the 138 kV PSTR project.

3.3.11 Grounding and Bonding

The Contractor is responsible for design, installation, and testing, which includes

providing the testing procedures for acceptance of all grounding and bonding for the facilities constructed.

3.3.12 Reliability, Availability, and Maintainability

The Contractor shall design, build, and document the project to achieve the required Reliability, Availability and Maintainability (RAM) and accessibility of the project.

3.3.12.1 Reliability.

The Reliability criteria for the project include design life and codes and standards to be applied.

The Reliability criteria include seismic design standards; flood level considerations; and maintainability features to achieve the required service life of the system and structures per the

Design Criteria, directive drawings, contract documents, and quality control and assurance processes.

3.3.12.2 Availability

The Contractor shall design, build, and document the project so that the availability of system during the hours of operation of the NNSS site for the duration of its design life is maximized.

Design shall include any planned unavailability of the system for inspection and maintenance.

3.3.12.3 Maintainability

The Contractor shall design and construct the system to minimize preventive and corrective maintenance requirements. The Contractor shall ensure that all required maintenance can be performed during a defined maintenance window. The designer shall provide all maintenance requirements and schedule, including time for crews to perform work for future planning. The following additional maintainability requirements shall be ensured in the design and construction:

3.3.12.3.1 Design Life and Maintainability – Components which have a shorter design/service life than the whole structure or system; for example, isolators, or grounding shall include design features to be replaceable or maintainable within the standard maintenance requirement time frame. The time fame shall be defined in operations and maintenance manual.

3.3.12.3.2 Accessibility – The design shall include accessibility provisions aimed at providing rapid access to equipment and structural elements which requires routine maintenance inspection, cleaning or replacement without the need for special tools or equipment.

3.3.13 Commissioning (Cx) During Design

The Contractor shall provide commissioning services for high voltage power transmission lines to prepare the commissioning design, technical specifications, testing documents, and prepare concurrence to operate system certificate. The Cx

contractor shall have performed a minimum 5 similar commissioning projects on 64 kV and above transmission lines within the last 5 years. The Contractor shall submit the Cx firm's qualification to the Government for review and concurrence. If the Cx firm is deemed unqualified for the project commissioning the Contractor shall use a different firm at no cost to the Government.

The Cx contractor shall contribute to the development of the appropriate sections in the Basis of Design (BOD) document. The Cx contractor validate the operation of each system to be commissioned and shall participate in design review meetings beginning prior to the Preliminary (60%) Design Review Meeting. The contractor shall submit a Commissioning CX report.

3.4 Design Submittal Requirements

The contractor's submittals shall include all explicit, noted, implied, and referenced items in this contract. The submittals will be reviewed for completeness using the Conceptual and Preliminary Design Implementation Guidance for NNSA Capital Line Projects guidance letter and 138 kV Submission Requirements Matrix. Submissions not meeting the requirements outlined in the attached memorandum and the attached 138kV PTSR Submission Requirements Matrix will be returned and will require resubmission at no cost or time to the Government. Each progressive design submittal should build upon the previous information to provide aclear basis of design development and design philosophy fitting to the project.

3.4.1 General Submittal Requirements

The Contractor shall provide Design Submittals to the Government as indicated in this Scope of Work (SOW), and other documents referenced in the Contract Documents. The Contractor shall include in the baseline schedule each Design Submittal and Government review period.

The Contractor shall submit all required items listed utilizing the appropriate form provided by the Contracting Officer as cover sheet/transmittal.

3.4.1.1 Text Documents: All text document submittals shall be delivered in both hardcopy and electronic formats: two (2) hardcopies, hardcopies shall include one (1) loose-leaf copy with additional copies shall be bound volumes, electronic text document files shall be submitted on CDs (non-rewritable) in the native file format (MS Word, MS Excel, MS Project, etc.) and in a .pdf version of the original.

3.4.1.2 Drawing Documents: All drawing document submittals shall be provided in both hardcopy and electronic formats: Two (2) hardcopies, hardcopies shall include one (1) full-size set of bound drawings with additional copies shall be 11x17 sets of bound drawings, electronic files shall be submitted on CDs (non-rewritable) to include the AutoCAD DWG files and pdf version of each drawing file.

3.4.1.3 Review: The Government will require ten (10) business days for review of each submittal. The Submittals found to be incomplete or not in compliance with the

SOW and basic contract will be returned to the Contractor for correction and resubmission. Under such circumstances the Government will have an additional review period to commence upon receipt of the revised submittals, and there will be no extension to the Period of Performance (POP). The DOR is required to respond in writing to all review comments and submit their annotated responses prior to the Submittal Review
Conference. The Contractor shall hold Submittal Review Session as part of the 60% and 90% Design
Review Meetings. Review comments with responses by the DOR shall be included in the Design Analysis as an appendix in the subsequent design submittal. All comments must be either accepted and incorporated into the following design submittal or satisfactorily rebutted.

3.4.1.4 Comment Annotations: Annotate all Government furnished comments, noting either the concurrence to incorporate the comment's direction, or the DOR's exception to any comments. Provide for every exception a concise, specific explanation of the exception. The DOR shall record all actions in response to all comments. Provide the comments at the review conference.

3.4.1.5 Comment Actions: If any comments change the scope of services required, identify such to the CO for resolution. Upon resolution, any modifications to the design shall become an integral part of the project requirements identified in this SOW. If a submittal contains numerous errors or deficiencies, and/or does not meet the specified requirements, the DOR shall re-submit corrected copies of the submittal. Each submittal must receive concurrence from the COR before proceeding to the next submittal point.

3.4.2 Preliminary Design Submittal (60%)

The Contractor shall submit a preliminary design submittal in accordance with MSTS OP-ENGR.009 and contains the minimum requirements indicated in the 138 kV Submission Requirements Matrix.
Specification submissions shall show changes to the master by using the "Track Changes" function.
Each progressive design submittal should build upon the previous information to provide a clear basis of design development and design philosophy fitting to the project.
The Contractor shall submit minutes of meetings within 5 working days of completion of meeting to project stakeholders.
The Contractor may commence construction on temporary features after the 60% Design Review submittal and meetings are complete. And all technical submittals, permits and requirements must be accepted and approved for the related temporary work. The Contracting Officer Representative will provide written notification to the Contractor acknowledging the requested work on temporary construction features.
Any Contractor errors or omissions to the design that require changes or amendments will

be at no cost to the Government.

3.4.3 Design Development Submittal (90%)

The Contractor shall submit a design submittal that incorporates the responses to the preliminary design submittal review comments and design refinements to the preliminary design submittal. The design development submittal shall be at the 90+% completion level and in accordance with MSTS OP-ENGR.009 and contains the minimum requirements as indicated in the 138 kV Submission Requirements Matrix leaving only reviewer comments to be addressed at the final design submittal.
All value engineering shall be completed by the end of this phase, and no functional changes are anticipated after the design development review. Submissions shall show changes to master by using "Track Changes" function. Each submission shall indicate changes from previous submission, not all changes to master.

The Contractor shall submit minutes of all meetings within 5 working days of completion to project stakeholders.

Construction may commence after the review and acceptance of the submittal is complete and receiving written notification from the COR. Anywork performed without notification from the Government will be at the sole risk of the Contractor.

3.4.4 Final Design / Issue for Construction Submittal

The Contractor shall submit a Completed Final Design Submittal of the design that incorporates the responses to the Design Development Submittal review comments. The completed final design submittal should include comprehensive drawings, specifications, design analysis, in accordance with MSTS OP-ENGR.009 procedure and the 138 kV Submission Requirements Matrix. The completed final design submittal shall be sealed by the DORs in accordance with State and Governmental rules and regulations. The purpose of the construction document phase is to add the level of detail required for construction of the project, coordinate the trades, and finalize the project's documentation for construction. Once the IFC design has been issued and accepted by the Contractor, the Government will be provided the IFC design in ten (10) working days.

3.5 Post Design Phase

The Contractor shall provide post design services as necessary during construction to include design changes due to field conditions for the 138 kV PTSR project at National Nuclear Security Site (NNSS), Mercury, Nevada. Post design services include but are not limited to:

3.5.1 Submittal Support

Provide verification, review and approve of construction related documents including, shop drawings, samples, diagrams, layouts, conceptual, descriptive literature, illustrations, performance and test data, and similar materials furnished by the construction contractor to ensure compliance and conformance with design documents.

3.5.2 Red Line Review

The contractor shall ensure the DOR reviews the contractor's as-built red line drawings monthly.

Upon completion of the project, Contractor will submit to the Government within thirty (30) working days, a complete set of the as-built drawings

3.6 Construction Phase

The Contractor shall provide construction services necessary to construct and install a complete and operating 138 kV PTSR project in accordance with the design, technical specification, contract including but not limited to those described below. All construction shall use new materials in accordance with federal and local site rules and regulations.

3.6.1 Construction Inspections

As necessary, the contractor shall ensure the DOR performs on-site construction observation services to ensure construction is compliant with the design documents. Provide a site visit report for each site visit that includes a description and photographs of work being performed.

3.6.2 Safety and Security

The Contractor shall be responsible for all work-site safety and security activities. The Contractor shall ensure that the principles of Integrated Safety Management are integrated into its operations and that its" Contractor Assurance System (CAS) reflects Contractor integrated performance related to these systems. The Contractor shall ensure that they maintain an approved NNSS Worker Safety and Health Program for the covered workplace. This includes preparing and submitting Site-Specific Health and Safety Plan and Site-Specific Security Plan prior to commencing construction activities. The Contractor may use and reference existing site Health, Safety and Security plans and augment these plans to incorporate specific 138 kV PTSR health, safety, and security requirements. Safety and security documents shall be dynamic and be updated by the contractor as necessary. A copy shall remain at the construction site available to all construction personnel. Any updates or revisions related to safety and security shall be copied to the CO and COR.

3.6.3 Hazardous Material Handling

The Contractor shall remove and dispose of all hazardous material in accordance with Federal, State, and local site laws rules, and regulations.

3.6.4 Utility Work and Coordination

The Contractor shall be responsible for coordinating, delineating, and protecting utilities into the design and construction. The Contractor shall coordinate and incorporate utility shutdowns with stakeholders in accordance with site requirements and regulations.

The Contractor is responsible for (cost and repair) any utility line break as a result of their construction activities. The Contractor shall notify the appropriate site authorities and COR if a utility line is broken as a result of construction activities as soon as

practical, or within a maximum 8 hours after the event. All excavation shall be performed in accordance with Federal, State, and local site rules and regulations.

3.6.5 Construction-Phase Submittals

Construction-phase submittals are defined as those submittals required under the construction technical specifications, such as shop drawings, product data, samples, installer qualification statements, manufacturer's instructions, and source and field quality control submittals.

The Contractor shall also maintain status on all submittals required under the construction technical specifications in the Construction Submittal Log. The Construction Submittal log shall be submitted monthly.

The construction-phase submittals shall be subject to Government review and concurrence. As part of the Contractor's self-certification, the Contractor's qualified person(s) and DOR shall confirm that the design intent is being met and that submittal is in compliance with the contract requirements.

3.6.6 Commissioning (Cx) During Construction

A formal Commissioning (Cx) process will be employed in accordance with this contract and shall align with the InterNational Electrical Testing Association (NETA) standard ATS-2017, Standard for Acceptance Testing Specification for Electrical Power Equipment and Systems, approved by American National Standards Institute (ANSI) to assure the new power and communications transmission system above is installed, tested, operated, and maintainable according to the operational requirements of the stakeholders.

Commissioning is a systematic process of ensuring that systems perform interactively according to the design intent and the owner's operational needs. This is achieved through a complete Commissioning process, beginning at the design phase with documented design and operating intent, and continuing through construction and acceptance phases, with actual verification of performance.

3.6.6.1 Commissioning activities during the design phases are intended to achieve the following specific objectives:

3.6.6.1.1 Provide a plan for the implementation of the Commissioning process, including the initial scope of systems to be commissioned for the project

3.6.6.1.2 Ensure that the design and operational intent are clearly documented

3.6.6.1.3 Provide a design review focusing on system performance, maintainability, and adherence to design intent

The Contractor shall use the same commissioning agent used during design development for construction. The commissioning agent shall observe the system install for compliance at a minimum of three (3) times during constructionand be on site during all system testing.

The Contractor shall coordinate all activities associated with the testing and commission

of the system with stake holders and agencies having jurisdictions. The Contractor shall notify stakeholders a minimum of 30 calendars prior to commencing any testing and commissioning. In addition, the Contractor shall notify stakeholders 7 calendar days and 48 hours prior to testing and commissioning to ensure there are no interferences with site operations.

The Cx firm shall prepare and submit to the Government a draft and final Commissioning Report documenting the Cx process, observations, testing procedures, testing results and concurrences that the system is ready for turnover and operation.

3.6.7 Demolition

The Contractor shall not commence demolition of operational systems until the new system is complete, tested and turned over for operations under CLIN 0001 of the current M&O contract and in accordance with the Demolition Plan.

3.6.8 As-Builts

The Contractor shall prepare and submit as-built drawings, signed and sealed, CADD drawings in accordance with contract requirements. As-built drawings shall fully reflect the final, completed, as- built condition, inclusive of works completed by others in support of the project and verified by the Contractor. The Contractor shall survey the installed utilities to verify the actual placement and include information on the CADD as-built drawings.

The Contractor shall prepare and submit as-built specifications, signed and sealed. As-built specifications shall fully reflect the final, completed, as-built condition, inclusive of works completed by others in support of the project and verified by the Contractor. The Contractor shall submit electronic files to the Contracting Officer and COR with as-Built specifications (with tracked changes) and original marked up as-built specifications (hard copies).

The Contractor shall prepare and submit as-built construction-phase submittals. As-built construction-phase submittals shall fully reflect the final, completed, as-built condition. Changes from such submittals shall be documented in the Construction Submittal Log. The Contractor shall keep a current set of prints with “Red Lines” on site at all times noting any deviations or clarifications generated by DOR supplemental instructions and RFI responses. Before completion of construction, the Contractor shall provide the DOR with Red Lines maintained in the field.

3.6.9 Environmental, Biological & SHIPO Mitigations

The Contractor shall be responsible for complying with all Environmental, Biological, SHIPO, and other similar requirements for this project. The Contractor is responsible for the review, coordination, permitting, design, construction, implementation, and

monitoring of the conditions, avoidance, minimization and mitigation measures, project design features, and other environmental commitments included in these documents. The Contractor shall submit a list of all mitigation related measures and features as part of the Environmental Management Plan (EMP) prior to commencing construction to allow the Government to verify completeness and concurrence with the list.
The Contractor's shall comply with requirements as specified in the NNSS site guiding documents, rules and regulations.

3.6.10 Construction Options

All work associated with the 138kV PTSR from Tweezer to U1A was incorporated into the base contract via Mod 0089. As a result, there are no options in the 138 kV PTSR base contract.

3.6.11 Contractor Initiated Change Request (CICR-001) Tweezer North Termination (TNT)

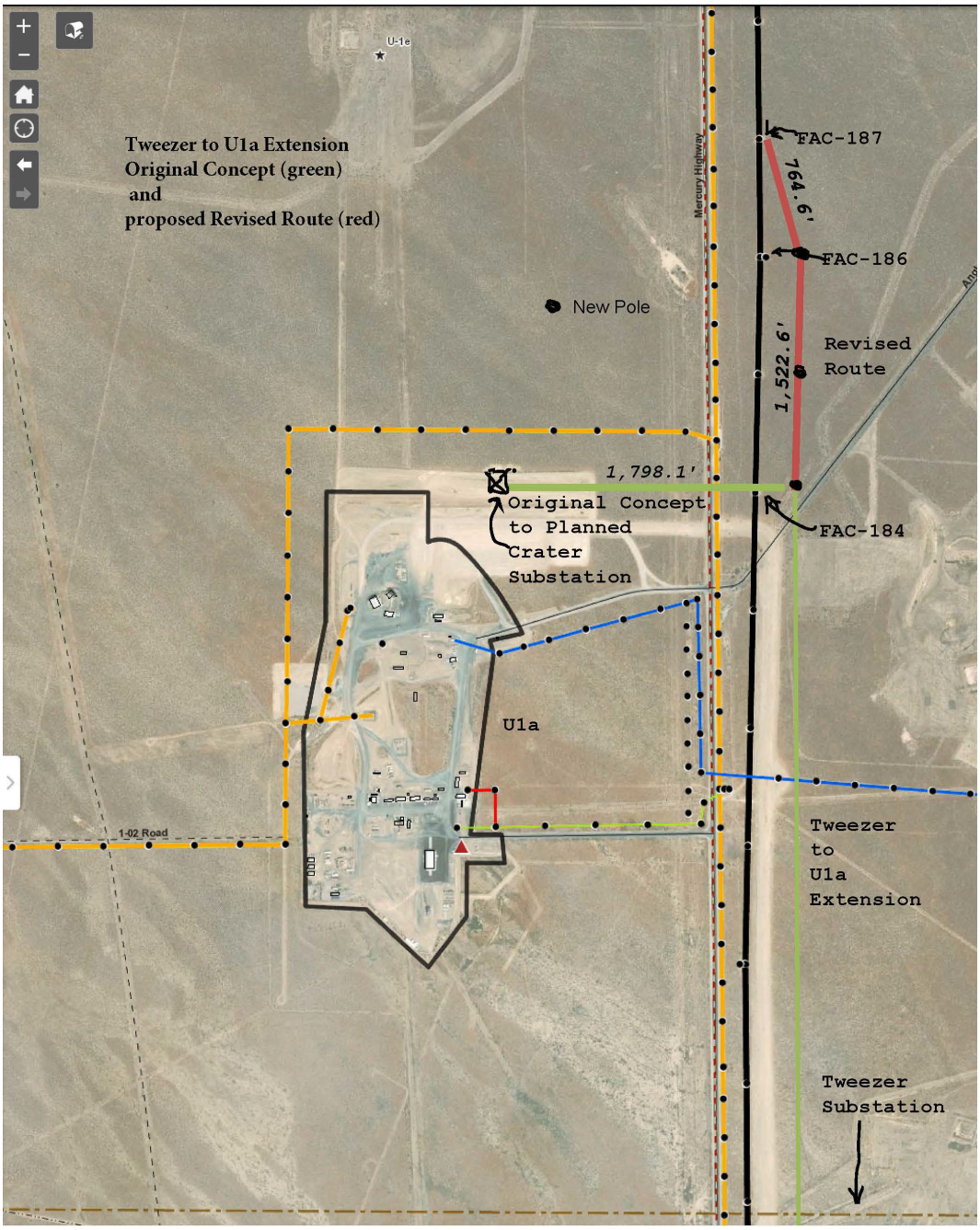
The original Scope of Work includes all material labor and equipment necessary to design, construct and operate the 138kV power line, including a 144 fiber optic line from the Tweezer Substation to the U1a planned Crater Substation. Tweezer substation to U1a is approximately 15,800 linear feet (LF) or approximately 3 miles. The planned Crater Substation requirement was removed from the U1a planning and therefore the 138kV power line spur was not needed.

See Image 1, approximately from points B to C1.

The additive portion of work associated with CICR-1 includes the design, construction, and operation of power line continuing from approximately FAC-184 north to a tie in point at approximately FAC-187. Specific to the additive work are 2 tangent type poles and 1 dead end type poles. See Image 1, approximately from points B to C2.

IMAGE 1- TNT Deductive and Additive Scope

(image, obtained from MSTS in CICR-001 received on 12/9/21, page 1) Added identifiers: A, B, C1, and C2.


Tweezer to U1a Extension
Original Concept (green)
and
proposed Revised Route (red)
U-1e
Mercury Highway
FAC-187
764.6'
FAC-186
New Pole
Revised
Route
1,522.6'
1,798.1'
Original Concept
to Planned
Crater
Substation
FAC-184
U1a
1-02 Road
Tweezer
to
U1a
Extension
Tweezer
Substation

PART I – SECTION H, SPECIAL CONTRACT REQUIREMENTS

All Special Contract Requirements in Section H of the contract shall apply to the sub-line item 0003A. In addition, special contract requirements below shall be applicable only to SubCLIN 0003A.

H-28 DIFFERING SITE CONDITIONS

FAR Clause 52.236-2 (Differing Site Conditions (APR 1984)), differing site conditions include, but are not limited to, the following types of circumstances:

- Discovery of historical, archeological, or human remains which are subject to preservation/treatment in accordance with federal, state, or local laws, regulations or policies
- Discovery of habitats for species protected under federal, state, or local laws, regulations, or policies
- Discovery of radioactive material
- Discovery of toxic or hazardous materials
- Discovery of unexploded ordnance/explosives

H-29 AVAILIBILITY OF UTILITIES

The Contractor may directly utilize, and may allow its subcontractor(s) to utilize government-furnished utilities and similar services (including but not limited to: water, sewer, electricity, telephone, internet, trash, and waste disposal, etc.) to the extent utilities and other similar services are available and accessible for use at the NNSS. There shall be no charge to the Contractor or Subcontractor for the use of government-furnished utilities or other similar services.
Where the utility is produced by the Government, the contractor shall carefully conserve utilities usage. The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer Representative, shall install and maintain all necessary temporary connections and distribution lines. Beforefinal acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

H-30 FORCE MAJEURE

Notwithstanding anything to the contrary contained herein, to benefit of this provision the contractor shall, as soon as reasonably practicable after the occurrence of any such event, (a) provide written notice to the Contracting Officer of the nature and extent of any such Force Majeure condition and (b) use commercially reasonable efforts to remove any such causes and resume performance

under this Agreement and the Ancillary Agreements, as applicable, as soon as reasonably practicable.
In the event of any such excused delay, the time for performance of such obligations shall be extended for a period equal to the time lost by reason of the delay.
Force Majeure conditions: (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather other than those customary for the region.

H-31 SPECIAL ROCK EXCAVATION

(a) Contractor shall be paid the fixed rate of $1,000 (in addition to the FFP) for each cubic yard of rock which must be excavated in excess of 250 cubic yards.
(a) Definition of Special Rock Excavation – Where applicable for measurement and payment purposes, rock excavation is defined as intact rock material encountered in excavating drilled shafts which cannot be removed with a conventional earth auger and/or underreaming tool, and which requires a rock auger, core barrel, or hand labor using air-powered tools and/or other special excavation procedures. Refusal of the earth auger shall be defined as a penetration rate equal to, or less than, 1 foot per 10-minute period with the full torque and crowd continuously applied. Earth, clay, coal seams, boulders, cobbles, rock fragments, soft fractured materials, or voids encountered between rock units will not be considered rock excavation.

H-32 SALVAGE

The estimated salvage value is $200,000. Estimated salvage will be credited at actual salvage proceeds. The salvage credit will be administered as a deduction from the total contract value. The total amount of actual salvage will be determined at the time of sale. The Government will withhold the estimated amount of salvage from final payment drawdowns until the contractor provides the salvage credit actuals. The salvage credit actuals will be deducted from the total contract value and the contractor may retain the actual salvage proceeds after remittance of salvage bill of sale.

H-33 PAID LEAVE UNDER SECTION 3610 OF THE CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT (CARES ACT) TO MAINTAIN EMPLOYEES AND SUBCONTRACTORS IN A READY STATE.

(a) In any request for equitable adjustment to the price (for a fixed-price type contract) or to the hourly rates and materials cost (for a time-and-materials type contract) of this contract, the Contractor may propose and the Government (without requiring consideration but precluding

additional profit) will treat--for the purpose of beginning negotiations--as allowable (if otherwise allowable per federal regulations) the incurred or estimated costs of paid leave (including sick leave) the Contractor or its subcontractors provide to keep employees in a ready state if--

(1) The employees: cannot perform work on a site approved by the Federal Government (including a federally-owned or leased facility or site) due to facilities closures or other restrictions; and cannot telework because their job duties cannot be performed remotely during the public health emergency declared on January 31, 2020 for COVID–19.

(2) The costs were incurred or will be incurred from January 31, 2020 through September 30, 2021.

(3) The costs do not reflect any amount exceeding an average of 40 hours per week for paid leave.

(b) Where other relief provided for by the CARES Act or any other Act would benefit the contractor or the contractor's subcontractors, including, but not limited to, funds available under sections 1102 and 1106 of the CARES Act, the contractor should evaluate applicability of such benefits in seeking reimbursement under the contract.

(c) The Contractor must represent in any request for reimbursement--

(1) Either: it has not received, has not claimed, and will not claim any other reimbursement for federal funds available under the CARES Act for the same purpose, including, but not limited to, funds available under sections 1102 and 1106 of the CARES Act; or if it has received, claimed, or will claim other reimbursement, that reimbursement or an estimate of it has been reflected in the request for equitable adjustment.

(2) Its request reflects all applicable credits (estimated if necessary), including

(i) Tax credits, including credits allowed pursuant to division G of Public Law 116-127; and

(ii) Applicable credits allowed under the CARES Act, including applicable credits for loan guarantees.

(d) The Government's treating--for the purpose of beginning negotiations--the costs as allowable, does not mean the Government--in determining the amount of the equitable adjustment is fair and reasonable--will agree to the Contactor's proposed adjustment to the price or to the hourly rates and materials costs.

H-34 ORDER OF PRECEDENCE

All clauses in the M&O Contract, including Special Contract Requirements in Section H of the Contract, shall apply to the sub-line item SubCLIN 0003A to the extent relevant. In addition, the special contract requirements specified in this Contract modification below shall be applicable only to SubCLIN 0003A. To the extent there are conflicts between the other M&O clauses/requirements

and the special SubCLIN 0003A clauses/requirements identified herein, the SubCLIN 0003A clauses/requirements shall prevail.

H-35 TERMINATION OF 138KV POWER TRANSMISSION SYSTEM REPLACEMENT (PTSR), SubCLIN 0003A IN CASE OF EXPIRATION OR TERMINATION OF CONTRACT NO. DE-NA0003624

In the event that Contract No. De-NA0003624 expires or is terminated, the contractor is not liable for the continuation of the 138kV Power Transmission System Replacement (PTSR), SubCLIN 0003A. 138kV Power Transmission System Replacement (PTSR), SubCLIN 0003A shall be terminated for convenience effective on the date of expiration or termination of in accordance with FAR Clause 52.249-2, Termination for the Convenience of the Government (Fixed Price) (Alt. I). The Government shall provide advance notice of the termination consistent with FAR 52.249-2.

(End of clause)

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PART II-CONTRACT CLAUSES, SECTION I

All clauses listed in the contract shall apply to SubCLIN 0003A. All construction and Firm-Fixed Price (FFP) clauses detailed below shall apply to SubCLIN 0003A.

Federal Acquisition Regulation Clauses		
FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.211-10	Commencement, Prosecution, and Completion of Work *(a) 10 calendar days; (c) 941 calendar days*	Apr 1984
52.211-12	Liquidated Damages – Construction *(a) $2,000 for each calendar day of delay*	Sept 2000
52.211-18	Variation in Estimated Quantity	Apr 1984
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data - Modifications	Oct 2010
52.222-7	Withholding of Funds	May 2014
52.222-8	Payrolls and Basic Records	Aug 2018
52.222-9	Apprentices and Trainees.	Jul 2005
52.222-10	Compliance With Copeland Act Requirements	Feb 1988
52.222-11	Subcontracts (Labor Standards)	May 2014
52.222-12	Contract Termination – Debarment	May 2014
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	May 2014
52.222-14	Disputes Concerning Labor Standards	Feb1988
52.222-15	Certification of Eligibility	May 2014
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	Feb 1999
52.222-27	Affirmative Action Compliance Requirements for Construction	Apr 2015

52.222-31	Construction Wage Rate Requirements – Price Adjustment (Percentage Method)	Aug 2018
52.227-1	Authorization and Consent Alt I (April 1984)	Dec 2007
52.227-4	Patent Indemnity – Construction Contracts	Dec 2007
52.229-3	Federal, State, and Local Taxes	Feb 2013
52.236-2	Differing Site Conditions	Apr 1984
52.236-3	Site Investigation and Conditions Affecting the Work	Apr 1984
52.236-5	Material and Workmanship	Apr 1984
52.236-6	Superintendence by the Contractor	Apr 1984
52.236-7	Permits and Responsibilities	Nov 1991
52.236-8	Other Contracts	Apr 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	Apr 1984
52.236-10	Operations and Storage Areas	Apr 1984
52.236-11	Use and Possession Prior to Completion	Apr 1984
52.236.12	Cleaning Up	Apr 1984
52.236-13	Accident Prevention Alternate I	Nov 1991
52.236-15	Schedules for Construction Contracts	Apr 1984
52.236-17	Layout of Work	Apr 1984
52.236-21	Specifications and Drawings for Construction	Feb 1997
52.236-26	Preconstruction Conference	Feb 1995
52.236-27	Site Visit (Construction)	Feb 1995
52.242-14	Suspension of Work	Apr 1984
52.242-17	Government Delay of Work	Apr 1984
52.243-4	Changes	Jun 2007
52.246-12	Inspection of Construction	Apr 1996

52.246-21	Warranty of Construction	Mar 1994
52.248-3	Value Engineering – Construction	Oct 2015
52.249-2	Termination for the Convenience of the Government (Fixed Price) Alt I (Sep 1996)	Apr 2012
52.249-10	Default (Fixed Price Construction)	Apr 1984
Department of Energy Acquisition Regulation Contract Clauses		
DEAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
970.5223-7	Sustainable Acquisition Program (OCT 2010), ALT I For Construction Contracts and Subcontracts (OCT 2010)	Oct 2010

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