Statement Of Work

Intaglio Plate Grinder Replacement

SECTION I: Background

1.1 The scope of this project is to replace the existing grinders with new grinders systems that meet operational, safety, quality, and currency production requirements. The replacements will ensure platemaking operations at the Bureau of Engraving and Printing (BEP) are maintained. The BEP currently has three (3) Rastelli plate grinders. Two (2) of the systems are located at the BEP Washington D.C. facility (DCF) and one (1) of the systems is located at the BEP Fort Worth facility (WCF). This effort supports the replacement of the Rastelli plate grinders in the Office of Engraving. Intaglio plate grinders are essential to the platemaking process and are used to grind, polish and finish plates to specification. The current fleet of grinders have exceeded their useful service life and are no longer maintainable because the original equipment manufacturer is no longer providing technical support or replacement parts Continued operation of the aging equipment increases the risk of production downtime, maintenance failures, and reduced operational reliability. To ensure uninterrupted currency production operations, the existing grinders must be replaced with new systems that provide improved performance, reliability, maintainability, and compatibility with modern production requirements.

This acquisition includes the procurement, delivery, installation, integration, testing, and commissioning of replacement Intaglio Plate Grinder systems, along with associated software, hardware, training, and technical documentation necessary to support BEP operations. The replacement effort will also include replacement of obsolete components and existing system hardware and software to improve operational efficiency, safety, and long-term sustainability of the equipment.

SECTION 2: Purpose

2.1 Product, Service or Outcome Needed:

2.1.1 Product Needed:

The BEP is in need of four (4) Computer Numerical Controlled (CNC), fully automatic, cylindrical surface grinders.

2.1.2 Outcome Needed:

- The grinding process shall be carried out automatically by control of the system.
- Grinding program shall allow the progress of the process to be monitored and displayed on the Human Machine Interface (HMI).

- The grinding machine shall have a simplified HMI allowing access to user adjustable parameters and data via touch screen, display any errors and warnings, and display all parameters (held in memory).
- The system shall also be capable of reporting any fault/alarms directly on the screen and shall enable easy troubleshooting.
- Cylinder shall hold a plate size of 880mm x 1000mm with a finished grind surface area of 860 x 850.
- The cylinder shall be supported on both ends with high precision spherical bearings with a positive air pressure system to prevent coolant migration ensuring the accuracy of grinding.
- Yield is 3 plates within an 8-hour shift.

2.2 Scope of the Product, Service, or Outcome.

2.2.1 To the greatest extent possible, components and configuration will first be assembled, tested, and demonstrated to the BEP at the Contractor's site during a Factory Inspection Test (FIT). A detailed list of contractor site specific components and configurations will be mutually agreed upon by the Contractor and BEP at Design Review.

2.2.2 The FIT will be surveilled by BEP and inspected according to a systems component and configuration list. A FIT will be performed for every Intaglio Plate Grinder awarded. After BEP acceptance of the FIT, the systems components shall be delivered to the BEP DCF and WCF location.

2.2.3 The Contractor shall perform all required testing on the machine at BEP facilities both DCF and WCF. After the grinder has passed the Bureau Acceptance Testing (BAT), the Contractor shall provide on-site operator and technical training required for full production. Contract shall include delivery of grinding machine, installation, commission (BAT), delivery of any spare parts required, training, documentation, & integration into our workflow (Not Change Control Board CCB approved), and warranty.

SECTION III: Technical Requirements/Tasks/Outcomes

3.1 Intaglio Plate Grinder Specifications

3.1.1 Grinder shall be capable of grinding a plate with a beginning thickness between 900 and 1100microns.

3.1.2 Wheel head, cylinder rotation, and diamond dressing all have variable speeds for operational adjustability.

3.1.3 Grinder shall produce plates with a maximum tolerance of +/- 5 micron and yield a surface finish of 4 micr3on (um Rz).

3.1.4 Wheel head shall have automatic balancing capabilities.

3.1.5 A grinding wheel static balancing unit that performs preliminary balancing of the wheel before connecting to the grinding machine and all the necessary accessories shall be provided.

3.1.6 Integrated crash detection unit shall be provided on the grinder. In the event of a crash or power failure, the machine shall be stopped and retracted from the plate surface.

3.1.7 The most recent version of the grinding machine shall be offered. It should also have the infrastructure and flexibility to allow for future upgrades.

3.1.8 All electrical and electronic parts of the grinding system shall comply with the international standards (CE or other standards). The connections such as plugs, sockets shall be suitable for use in the United States of America. The system shall be operational with 220/380 Volt AC and 60 Hz (±5%) power supply.

3.1.9 The grinding machine shall not cause any significant dimensional or tolerance variation of the plates(due to high process temperature etc.) or any significant change in the hardness measurement of the plate after the grinding process.

3.1.10 The operating system shall allow us to create log files of the ground plates and to store them for a certain period. Data shall be transferable to external source.

3.1.11 There shall be hardware or software for breakdown diagnostic, breakdown localization and troubleshooting.

3.1.12 The machine shall have an integrated measuring system capable of measuring within the required thickness tolerancing.

3.1.13 The grinder shall have a fully enclosed cabinet with sliding door (s) for access to the machine along with viewing windows. An elevated platform shall be supplied for the operator.

3.1.14 Grinder shall have automatic adjustment of desired measurement at check mode.

3.1.15 Grinder shall have automatic alignment of zero location on dresser and cylinder.

3.1.16 Submitter shall have at least two (2) similar grinders already in operation within the currency manufacturing industry

3.1.17 Grinder shall perform and record measurements of plate thickness at start of the grinding cycle, at check mode of the grinding cycle, and at finish of cycle.

3.1.18 A fully automatic rotative dressing system with automatic compensation of wheel wear shall be provided for the grinding wheel.

3.1.19 A closed loop coolant filtration system for collecting nickel dust and grinding wheel residues/sludge shall be integrated into the machine.

3.2 Design Review Task

3.2.1 As part of the development of the system, the Contractor shall schedule and conduct a design review for each Grinder with the BEP to discuss the specifics of the design and development activities planned for the Grinder.

3.3 Security Requirements *(Mandatory Minimum Element)*

3.3.1 Non-Disclosure Agreement. The Contractor shall complete the Non-Disclosure Agreement (NDA) prior to the Government's release of proprietary and/or sensitive information. The NDA will

cover all work to be performed under this contract and shall apply to all Contractor personnel as well as any subcontractors.

3.3.2 Safeguarding Government Furnished Materials. Under the performance of this contract, the BEP shall provide Government Furnished Materials that are considered items of security. The Contractor shall abide by all requirements and instructions of the BEP's Office of Security during the performance of this contract.

3.3.3 On-site Services Requirements (Mandatory Minimum Element)

3.3.4 All Contractors must comply with the requirements and procedures established through the BEP Environmental, Health, and Safety (EHS) document(s):

- 75D-07.0-04 EHS Contractor Requirements ***(Attachment 001)***
- 75B-07.0-06 EHS Requirements for Large Equipment Purchases ***(Attachment 002)***
- 75W-08.0-02 EHS Contractor Requirements ***(Attachment 0003)***

The applicable contents of the document(s) must be adhered to. The BEP shall furnish the document(s) as part of the contract.

3.4 Safety Requirements *(Mandatory Minimum Element)*

3.4.1 The following safety requirements shall be met:

- **Noise Level**: The noise produced by the operation of the press within specified speed range shall not exceed 85 Decibels A-weighted Sound Level (DBA) when measured at 914 mm (3 feet) distance along the plan view of the press from the press and at an elevation of 1,524 mm (5 feet) including the wiper and inking areas of the press.
- **General Safety:** The plate grinders be designed to always prevent injury to operation and maintenance personnel. The press shall be equipped with service access equipment, such as catwalks, access platforms, access ladders, lifts, and other equipment for operation and maintenance. Fixed stairs shall be provided in compliance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.24, Fixed Industrial Stairs. All catwalks, access platforms, access ladders, lifts, hoists, and any other equipment that are furnished, shall be built, and tested to comply with ANSI and OSHA standards. Special attention shall be given to providing proper 'angle of steps as indicated in paragraph (e) of the referenced standard. All press and service access equipment shall be guarded as required by applicable portions of OSHA Regulations.

  The presses shall comply with ANSI Standard B65.1, Safety Standard-Printing Presses.

- **Sharp Edges:** All sharp edges and corners, which present personnel hazards, shall be guarded or padded. All covers and safety guards shall be interlocked with press control to prevent its normal operation while any cover or guard is open or absent. Only local jogging control at a reduced speed is allowable provided no other covers are opened or removed. The location of opened switches shall be displayed on the Master Control Station. Covers and guards shall be manufactured for easy removal by Bureau personnel with tools to facilitate removing mechanical and electrical parts for repair. All rotating and reciprocating parts shall be guarded as specified by OSHA regulation 29 CFR 1910.212.

- **Heated Surfaces:** Prevent heated surfaces from causing burns to personnel during operation.

- **Asbestos:** Materials containing asbestos shall not be used.

- **Airborne Contaminants Employee Exposure:** Operation of the grinder shall not result in worker exposure to airborne contaminations exceeding current maximum allowable concentrations established by Occupational Safety and Health Administration (29 CFR 1910.1000)

- **Grinder Locking Arrangement:** The grinder shall be equipped with a locking arrangement that will prevent unauthorized manual or power operation of the machine. An electrical interlock shall be provided to prevent accidental starting with the mechanical lock engaged.

- **Safety Data Sheets:** Safety Data Sheets (SDS) for all contractor supplied and specified chemicals that are part of the process shall be supplied by the contractor and must be approved by WCF EHS Branch and/or DCF OEHS prior to bringing onto the respective site. The SDS shall comply with the OSHA, as listed in standard 29 CFR 1910.1200, with particular emphasis on paragraphs (g) and (i).

- **Overload Protection:** Grinders shall be equipped with overload protection and power factor correction devices to prevent damage to its components and operating personnel.

- **Safe-Ready:** All control stations shall include a "safe-ready" collar or equivalent. Upon turning the collar into a safe position, it shall be impossible to start the grinder from any other station. Console shall indicate that the interlock, including emergency stop buttons, causes the grinder to start or not.

- **Emergency Stop:** Whenever an Emergency Stop is activated, the machine shall stop within one (1) second to reduce damage to the machinery and injury to personnel. An Emergency Stop may be initiated due to the machine's internal control logic detecting an

emergency situation, activation of personnel safety devices (i.e., safety curtains, cover interlocks or other devices designed to protect personnel), or by personnel manually activating an emergency stop button.

- **Energy Isolation:** Disconnect or lockout devices shall be provided and identified with signage for all sources of energy on the grinder. This includes electrical, hydraulic, pneumatic, and kinetic sources of energy. All isolating devices (levers, breakers, valves, etc.) for all associated energy sources (electrical, hydraulics, pneumatics, gravity, etc.) shall be identified by a color-coded tag which indicates the type of energy source, the magnitude of the energy and an ID number. All isolating devices shall be capable of being locked out with a standard locking device and/or padlock. Stored sources of energy such as pneumatic and hydraulic forces shall be automatically bled and returned to a zero-energy state when an interlocked device (i.e., a guard or a door) is opened.

3.5 Environmental Protection Requirements (***Mandatory Minimum Element***)

3.5.1 All equipment installed at the Bureau shall meet all local, state, and federal environmental regulations, including but not limited to air quality, industrial solid waste, hazardous waste, and wastewater. The equipment installed at the Bureau shall comply with the following regulations:

- Federal Regulation: Environmental Protection Agency, (EPA) Clean Air Act Amendments of 1990, Section 112-Air Toxics (http://www.epa.gov/air/oaq_caa.html).40 CFR 403-General Pretreatment Regulations for Existing and New Sources of Pollution (Part 403 General Pretreatment Regulations for Existing and New Sources of Pollution | US EPA).
- 30 TAC (Texas Administrative Code) - Chapters 101, 115, and 116 for Air Quality Rules and air permitting.
- City of Forth Worth Code – Chapter 12.5 for Industrial Wastewater
- 30 TAC – Chapter 335 for Industrial Solid Waste and Municipal Hazardous Waste
- 40 CFR 403 - General Pretreatment Regulations for Existing and New Sources of Pollution
- 40 CFR 433 – Metal Finishing Point Source Category
- 40 CFR 261 – Identification and Listing of Hazardous Waste
- District of Columbia Municipal Regulations (DCMR), Title 20, Subtitle A, Air Quality Regulations
- District of Columbia Municipal Regulations (DCMR), Title 20, Subtitle E, Hazardous Waste Regulations
- District of Columbia Municipal Regulations (DCMR), Title 21, Water and Sanitation, Chapter 15, Discharges to Wastewater System Regulations
- P.L. 102-486, Energy Policy Act of 1992, October 24, 1992
- 40 CFR Part 247, Comprehensive Guideline for Procurement of Products Containing Recovered Materials, May 1, 1996

- Texas Commission on Environmental Quality (TCEQ) regulations in Texas Administrative Code Title 30 Chapters 101 through 335 as applicable
- City of Fort Worth Code of Ordinances, Part II City Code; Chapter 12.5 Environmental Protection and Chapter 16: Health and Sanitation, Chapter 13 Fire Prevention and Protection.
- Maryland Department of the Environment (MDE) regulations in Code of Maryland Regulations (COMAR) Title 26 Subtitles 01 through 27 as applicable

3.6 Air Pollution Control

3.6.1 The DCF is in a non-attainment area for Volatile Organic Compounds (VOCs) and Particulate Matter (PM 2.5). The WCF is in a nonattainment area for VOCs. Any equipment to be installed in either the DCF or the WCF must meet Lowest Achievable Emissions Rate (LAER) standards in accordance with EPA, TCEQ, and District of Columbia regulations. Maximum Achievable Control Technology (MACT) standards may also be applicable to control the emissions of any Hazardous Air Pollutants that result due to the installation of new equipment or change in the method of operations of existing equipment.

3.6.2 The Contractor shall identify potential source locations of air pollutant emissions from the equipment. Equipment must be designed so that pollutants can be captured and ventilated to air pollution control devices. If emission capture and control are required, the Contractor may be required to propose and provide a design and equipment for capture and control of the pollutant in question.

3.7 Wastewater

3.7.1 Information shall be provided to the OEHS or WCF EHS through the COR on the characteristics of all effluents (liquids which can be pumped or gravity flow liquids) that will come from the equipment, either regularly or intermittently, including routine or scheduled maintenance work. This information will be used to determine the feasibility and method of treating the effluents either in the Wastewater Pre-Treatment Plant or requiring that the materials be handled through the Solid/Hazardous Waste Program.

3.8 Energy, water, and materials usage programs

3.8.1 The Contractor shall make every effort to provide the most energy and water efficient equipment to the Bureau. The contractor shall furnish all information to document the energy and water usages for the system, including all calculations. The Contractor shall comply with:

- P.L. 102-486, Energy Policy Act of 1992, October 24, 1992
- 40 CFR Part 247, Comprehensive Guideline for Procurement of Products Containing Recovered Materials, May 1, 1996

3.9 Equipment Lighting

3.9.1 All lamping shall be LED.

3.10 Solid Hazardous Waste

3.10.1 Equipment that generates non-liquid wastes (wastes which cannot be pumped, or which do not flow by gravity), either continuously or intermittently, scheduled or routine maintenance work, and normal operation, must be designed to allow for removal of the waste in an ergonomic manner to allow the operator to transfer the waste into a fifty-five (55) gallon drum (1A1, 1A2, or other appropriate container) as needed. Information shall be provided as to the specific quantity, nature and characteristics of the non-liquid waste generated so that a waste determination may be performed by OEHS in accordance with 40 CFR 261 – Identification and Listing of Hazardous Waste.

SECTION IV: Bureau Acceptance Test (BAT) and Factory Inspection Test (FIT)

4.1 Bureau Acceptance Test (BAT)

(1) A BAT will be performed for each Intaglio Plate Grinder included on this award. The duration of BAT is expected to be five (5) working days for each grinder, of which four (4) days will require production. The Bureau Acceptance Test (BAT) will occur at the BEP's facility after commissioning. The contractor shall perform a BAT in the presence of BEP personnel. Contractor's personnel shall provide advice and guidance to the BEP. The purpose of the BAT is validation of the design, functionality, and performance requirements of the contract. Testing of the system shall be scheduled to occur in accordance with the Contract. Contractor is responsible for scheduling all daily activities in such a way that all design, functionality, and performance requirements shall be sufficiently demonstrated. All acceptance testing shall be performed in the presence of authorized Bureau personnel. Additional testing or demonstrations may be required to demonstrate the system, or subsystems, capabilities, and compliance with the requirements.

The BEP will furnish all items listed as government furnished materials and will provide a crew of experts to operate the system during the BAT. The contractor shall provide any and all vendor provided materials, materials not identified as government furnished, and individual(s) to orchestrate all testing activities and advise BEP personnel operating the system to ensure demonstration of all items.

If the equipment does not successfully pass the first BAT and must be retested, the Contractor shall assume ALL costs of retesting including personnel lodging, travel, and materials. All testing shall be performed in accordance with the technical requirements listed in the Statement of Work. If during the performance of testing, it is deemed that the equipment is not performing to the specified requirements, testing may be stopped to allow for corrective actions to occur and restarted only after joint ag

re
ement by both BEP and the Contractor. If it is determined that significant problems or corrective actions are required, the Contractor can request that testing be stopped. Once corrective actions have occurred, the contractor shall notify the BEP for rescheduling the test.

If the test is deemed unacceptable, the BEP reserves the right to require a full or a partial retest of the equipment and the Contractor must provide the BEP with all of the following:
a. Causative factors for the nonconformance
b. A written explanation on how the Contractor proposes to correct the nonconformance
c. The estimated time that will be necessary to correct the nonconformance
d. How the Contractor intends to demonstrate compliance.

Once a BAT is in progress, if there are extenuating circumstances or equipment-caused delays, the Bureau may exercise one of the following options:
a. Extend the test accordingly
b. Restart the test from the beginning
c. Abort the test

Since during testing security items will be required, all security measures, policies, and procedures of BEP shall be followed. All Contractor personnel assigned to work around or on the equipment during testing shall have been approved by the BEP's Office of Security. Approval by the BEP's Office of Security requires that each individual completes and submits a Standard Form 85, Questionnaire for Non-Sensitive Positions, and associated supplements to the BEP for review and background check to be performed.

(2) Final acceptance of the system will occur after the following:
a. Successful completion of the BAT
b. Successful Training of all BEP personnel
c. Resolution of all punch-list or open items
***** System validation is required internally after the BAT is accepted.*****

4.2 Factory Inspection Test (FIT)

A FIT will be performed on each Intaglio Plate Grinder included on this award, prior to delivery to the BEP. The duration of the FIT is expected to be five (5) working days for each Grinder, of which four (4) days will require production. Since BEP items of reproduction (i.e. plates or paper) may be present for the performance of the FIT, the Contractor shall submit in conjunction with their detailed Test Plan, a Security Plan, how they will address the Security and Accountability requirements to safeguard BEP items during the preparation and performance of the FIT.
All control system programs, wiring diagrams, and bill of materials showing the equipment used at the FIT shall be provided to BEP for review at each FIT.

SECTION V: Training

5.1. Training Requirements

5.1.1 The contractor shall provide Intaglio Plate Grinder training to BEP end-users and maintenance personnel. Training shall be based upon the information included in the approved training plan (section 5.2), equipment's operation and maintenance manuals, any supplemental devices, and information the Contractor and BEP jointly deem necessary for satisfactory training.

5.1.2 Training shall be given in separate, dedicated training sessions tailored specifically to the distinct roles of end-users and maintenance personnel.

5.1.2.1 User training shall focus on daily operations, standard workflows, and basic troubleshooting. Training shall be sufficient to adequately prepare the operator to safely run the Intaglio Plate Grinder independently while meeting BEP production requirements. Training shall be performed with BEP test plates as reference.

5.1.2.2 Maintenance training shall focus on advanced diagnostics, preventive maintenance, and repair procedures.

5.1.2.3 Training shall also cover any subsystems and supporting equipment.

5.1.3 The Contractor shall provide five (5) business days (40 hours) of user training and five (5) business days (40 hours) of maintenance training. Any training days or hours left unused due to installation delays, scheduling conflicts, or operational constraints shall carry over and remain available for use during subsequent machine installations at the BEP discretion.

5.1.4 The BEP retains sole authority to determine the total number of personnel to receive on-site training. The Contractor shall accommodate the entire cohort designated by the BEP. The COR will provide the Contractor with the final attendee count and roster no later than thirty (30) calendar days prior to the scheduled start of training.

5.1.5 Training shall be provided on-site and in-person at both DCF WCF for Intaglio Plate Grinder installed.

5.1.6 Training shall be performed after the BAT has been successfully completed and accepted by the BEP.

5.2 Training Plan

5.2.1 The Contractor shall submit a detailed training plan and schedule to the Contracting Officer Representative (COR) for review and approval at least sixty (60) calendar days prior to the FIT. The Government will review the submission and provide approval or comments within fourteen (14) calendar days of receipt. The training plan shall include an hourly breakdown of the subject matter to be covered during each training session. Two weeks prior to conducting a class, the Contractor will be informed as to the hours that the training sessions will take place.

5.2.2 Operator training shall include related safety, health, and environmental topics such as those outlined in Section 5.4.1.

5.2.3 Contractors shall provide an approximate need of projected downtime of machine in order to complete maintenance and training as to allow for BEP adjustments to meet production needs.

5.2.4 Contractor shall inform the BEP COR sixty (60) days prior to the BAT to coordinate and schedule training. The Contractor shall provide all training materials to the COR prior to training for review and approval by the BEP. All printed training aids shall be provided for the course, be in English language, and become the property of the Government.

5.2.5 Training personnel shall be qualified representative(s) and be proficient in the English language. Contractor shall provide specialized training to familiarize BEP personnel on the operation of the system, parts, and to help ensure reliable performance and maximum service life.

5.2.6 Operator training shall include related safety, health, and environmental topics such as those outlined in Section 5.4.1. One (1) operator class shall be provided, lasting five (5) days for up to six (6) BEP Subject Matter Experts (SME) and up to three (3) additional BEP specialists may attend as observers.

5.2.7 Contractors shall provide an approximate need of projected downtime of machine in order to complete maintenance and training as to allow for BEP adjustments to meet production needs.

5.2.8 Contractor shall inform the BEP COR thirty (30) days prior to maintenance to coordinate and schedule maintenance and training. The Contractor shall provide all training materials to the COR prior to maintenance for review and approval by the BEP. The training shall be in person . All printed training aids shall be provided for the course, be in English language, and become the property of the Government.

5.2.9 Training personnel shall be qualified representative(s) and be proficient in the English language. Contractor shall provide specialized training to familiarize BEP personnel on the operation of the system, parts, and to help ensure reliable performance and maximum service life.

5.3 Instructor Qualifications

5.3.1 Instructors shall create a positive learning environment to facilitate the intellectual development of students. Instructors shall have the following qualifications:

5.3.2 Capable of developing, managing, and delivering training using classroom and hands-on instruction to attain learning objectives in relation to BEP organizational needs.

5.3.2 Reviewing training materials considering the students' backgrounds and course objectives to ensure consistency of quality and accuracy of content.

5.3.3 Ensure a variety of learning styles can be met by selecting appropriate methods and media for instructional delivery.

5.3.4 Monitoring participant progress and instructional program effectiveness; establishing and maintaining a learning environment to promote student engagement and participation actively and freely.

5.3.5 Fluent in English and all training materials shall be presented in English.

5.3.6 Must have successfully completed training in the craft, of which training will be provided, to a level sufficient to be classified at least at the Journeyman level, Master level preferred.

5.3.7 Possesses full and detailed knowledge, experience, skills, and proficiency with the subject equipment; capability to configure, set up, trouble-shoot, and make adjustments, or adjust settings, etc.

5.3.8 Shall be considered a SME in the area being covered by the training. Continually updating technical knowledge of equipment and techniques within the subject area.

5.3.9 Training requirements and trainee prerequisites will be defined in detail during the SOI Intaglio Grinder design reviews and will include the following criteria:

5.4 Maintenance Training

5.4.1 The Contractor shall provide 5 business days (40 hours) of training for all maintenance personnel on the Grinder, including subsystems and supporting equipment. BEP Electro-Machinists are cross-trained Electricians-Machinists and shall be trained in both the electrical and mechanical maintenance of the Grinder.

5.4.2 Training shall be sufficient to adequately prepare maintenance personnel to support the Grinder, including debugging problems or incidents, independently to meet the unscheduled corrective maintenance and preventative maintenance requirements.

5.4.3 Maintenance training shall include related safety, health, and environmental topics.

5.5 Included Documentation and Training:

5.5.1 User manual + maintenance documents – English

5.5.2 Hardcopy + softcopy – English

5.5.3 Updated Spare part catalogue – English

5.5.4 Five (5) days operator training per installation – English

5.5.5 Five (5) days maintenance training per installation – English

SECTION VI: Technical Documentation

6.1.1 The Contractor shall provide the BEP with accurate, complete, and current technical documentation of the Grinder, including all supporting equipment. The documentation shall include engineering drawings, operation, bill of materials, and maintenance manuals, and purchase component information.

6.1.2 One (1) complete set of documentation shall be provided in electronic format upon delivery of the first system to BEP. The set shall be provided on Compact Disk – Read Only Memory (CD-ROM) or Flash Drive. The files shall enable the BEP to copy the data onto servers for access not only on the machinery but also for engineering, maintenance, and operations personnel via the BEP's intranet.

6.1.3 The Contractor shall also be responsible for providing updates to the technical documentation, whenever changes or modifications occur during the term of this contract. These updates should reflect the latest functionality and maintenance of the system. The Contractor shall supply technical data covering the Grinder.

6.1.4 Technical Documentation shall provide means to export data/information into Micro-Soft (MS)-Excel or other programs.

6.1.5 In the event the equipment is to be furnished by firms whose standard technical documentation does not use the English language or engineering terminology commonly used in the U.S., the technical documentation shall be modified as follows:

6.1.6 All documentation shall be provided in the English language, including drawing titles, part names, material specifications, manufacturing processes, heat treatments, finishes, or any other notations necessary for manufacturing the part. It will not be necessary to translate metric (SI) measurements into inch or foot measurements.

6.1.7 Any international standards (ISO and DIN) referenced shall be provided translated into the English language.

6.2 Engineering Drawings

6.2.1 Drawings covering the Grinder shall be provided to the COR; mechanical and electrical; and shall include individual parts, subassemblies, and assemblies. Drawings for all individual parts, detail drawings, shall show the form, fit and function of the part, materials utilized, and any manufacturing process information required for the BEP to reproduce the part in an emergency. Detail drawings shall reference their respective subassemblies and assembly drawings.

6.2.2 Drawings shall be provided as raster images in Tagged Image File Format (TIFF) (.tif) electronic format. If generated via a Computer Aided Drafting (CAD) system, the drawings shall also be provided as vector images in AutoCAD (.dwg) electronic format.

6.2.3 Each drawing shall be a separate independent file. Drawings that consist of multiple pages shall be supplied as a single file. Drawings shall be scanned at an industry standard resolution not finer than 200 x 200 dpi. Consultative Committee for International Telegraphy and Telephony (CCITT) Group 4 (2d) Fax standard for compression shall be used. All drawing images shall be supplied free of scanning or conversion defects. Images shall be cropped to the border of the drawing with no outside white remaining. Images shall be straightened and oriented so that the title block is located on the lower right corner. The technical rights the BEP obtains under this contract to the drawings shall be annotated on the images.

6.2.4 The BEP utilizes the properties tab fields for the purposes of sorting and incorporating inventory information with part drawings. All TIFF (.tif) image files provided shall include the following fields within the properties summary tab available for utilization by the BEP: Author, Keyword, Comments, Title and Subject.

6.2.5 Files shall be identified using the drawing number as the title. A separate folder shall be provided for each logical group of assemblies.

6.3 Bill of Materials

6.3.1 Operation and maintenance manuals shall be provided for the Grinder. Manuals via text and graphical illustrations, shall address all the requirements necessary for operation and maintenance personnel to operate and maintain the equipment without prior training and be in the English language. A list of trouble-shooting procedures should be available for quick reference to identify malfunctions. One (1) electronic copy in Adobe Intelligent PDF format or MS-Word shall be provided. This copy shall have links added from the table of contents, list of figures and an index, if available, to the referenced pages. Any internal table of contents or references to figures shall be linked to the referenced page or figure. In addition, the Contractor shall add bookmarks to the PDF files for all major headings. The manuals shall include a listing of all codes/programs used in the equipment and include a section devoted to safety, health, and environmental topics. The manuals shall detail all safety functions and locations.

6.4 Electronic Database Documentation

6.4.1 A complete detailed design document for the Data Collection System (DCS) shall be provided to the COR. The documentation shall include a complete listing of all database tables, all calculation items, interface points, DCS functions and processes, hardware and software configurations, and a glossary of all terms and entries.

SECTION VII: Warranty

The Contractor shall provide the following warranties:

7.1 Equipment Warranty

- Warranty shall include materials and labor for the repair or replacement of defective parts and service at the installation site for a period of at least one (1) year (12 calendar months) after the BEP's final acceptance of the equipment.

- During the warranty period, the Contractor personnel shall respond to a service call within seventy-two (72) hours or less, and have spare parts, if required, for the service call. The Contractor shall provide all necessary information for the COR to make service contacts, i.e., names, addresses and telephone numbers. Upon completion of a service call, the contractor shall furnish a report, in English, documenting the work performed and any recommendations, including preventative maintenance, to lessen the potential of a future occurrence.

7.2 Parts Warranty

7.2.1 A one (1) year (12 calendar months) warranty shall be included on all parts from the time the parts are removed from BEP stock to be used on the Grinder.

7.3 Spare Parts

7.3.1 The BEP intends to purchase spare parts for the Grinder by ordering off the Spare Parts Listing supplied by the Contractor.

7.3.2 Each individual spare part ordered and delivered shall bear a tag with the manufacturer's part number and the BEP's stock number that will be on the BEP purchase order. Any parts not identified properly will be returned to the Contractor for correction at the Contractor's expense

SECTION VIII: Deliverables

SOW Paragraph	Deliverable	Due Date	Deliverable Recipient	Deliverable Format
2.2.1	Detailed list of contractor site specific components and configurations	14 days prior Design Review	COR	PDF
5.1.1	Technical Documentation (engineering drawings, operation and maintenance manuals, and purchase component information)	At time of delivery	COR	Compact Disk – Read Only Memory (CD-ROM) or Flash Drive
5.2.1	Detailed training plan and schedule	60 days prior to scheduled training	COR	PDF
6.2.1	Mechanical and Electrical Drawings - Individual parts, Subassemblies, and Assemblies.	At time of delivery	COR	Raster images in Tagged Image File Format (TIFF) (.tif) electronic format. If generated via a Computer Aided Drafting (CAD) system, the drawings shall also be provided as vector images in AutoCAD (.dwg) electronic format
6.3.1	Operation and maintenance manuals	At time of delivery	COR	PDF

6.3.1	A list of trouble-shooting procedures should be available for quick reference to identify malfunctions	At time of delivery	COR	One (1) electronic copy in Adobe Intelligent PDF format or MS-Word shall be provided
6.4.1	Data Collection System - Design document	At time of delivery	COR	PDF
7.1	Equipment Warranty	At time of delivery	COR	PDF
7.2	Parts warranty	At time of delivery	COR	PDF

SECTION IX: Performance Delivery Period

9.1 The period of performance for this contract is five (5) years: A twelve (12) months base period and four (4) option periods each twelve (12) months.

9.2 The Intaglio Plate Grinder shall be delivered and installed within 360 days of contract award.

- The one-year base period shall begin following delivery, installation, and acceptance.
- Training shall be performed on a day mutually agreed on by the Government and Contractor.

SECTION X: Place/ Location of Performance/ Delivery

10.1 Place/ Location of Performance/ Delivery.

Deliverables as required during the performance of this contract shall be delivered F.O.B. destination. The equipment and supplies identified shall be delivered and installed through the life of the contract to the following address:

Washington, DC Currency Facility 14th & C St. SW Washington, DC 20228	&	Fort, Worth, TX Currency Facility 9100 Blue Mound Road, Fort Worth, TX 76131

10.2 Federal Government Holidays:

If these holidays fall on Saturday, the preceding Friday shall be observed. If these holidays fall on Sunday, the following Monday shall be observed.

- New Year's Day 1st day of January
- Martin Luther King Jr.'s Birthday 3rd Monday of January
- Presidents Day 3rd Monday of February
- Memorial Day Last Monday of May
- Juneteenth Day 19th day of June
- Independence Day 4th day of July
- Labor Day 1st Monday of September
- Columbus Day 2nd Monday of October
- Veterans Day 11th day of November
- Thanksgiving Day 4th Thursday of November
- Christmas Day 25th day of December

The Contractor shall coordinate with the Government regarding hour of operation for BEP Year End Shut Down (Y.E.S.). BEP's Y.E.S. period typically occurs December 25th through January 1st of each calendar year. For other than firm fixed price contracts, the Contractor will not be reimbursed when the government facility is closed for the above reasons. The Contractor must at all times maintain an adequate workforce for the uninterrupted performance of all tasks defined within this SOW when the Government facility is not closed for the above reasons. When hiring personnel, the Contractor shall keep in mind that the stability and continuity of the workforce are essential.

SECTION XI: Special Requirements

11.1 Access to Government Facilities: The BEP is a secure facility, and all instructions of the BEP Police must be obeyed. Weapons, cameras, alcohol, or illegal drugs are not allowed on site and are subject to seizure. Persons entering the BEP will be subject to magnetic and/or hand examination and items under their control shall be examined by x-ray or hand inspection. Note that large items cannot be accepted through the 13th or 14th St. SW entrances and must be delivered through the BEP loading dock. During the life of the contract, access to the Government facility for the Contractor, its subcontractors, and suppliers shall be made available as required. During all operations on Government premises, personnel for whom the Contractor is responsible shall comply with the rules and regulations governing the conduct of personnel and the operation of the facility. The Government reserves the right to require the Contractor's

employees to sign in and/or sign out of the Government facility. While located within the District of Columbia, the BEP will not provide parking.

When performing services at the place of installation such work must be performed without:

- Interfering with Government business
- Unduly restricting traffic
- Causing unsafe conditions for employees, contractors, or visitors
- Adversely affecting the operation of BEP Facility.

Failure to adhere to BEP security regulations could result in revocation of access to the BEP and termination of the contract.

11.2 Travel Requirements: In accordance with FAR 31.205-46(a), Costs incurred by Contractor personnel on official company business for transportation may be based on mileage rates, actual costs incurred, or on a combination thereof, provided the method used results in a reasonable charge. Costs incurred by Contractor personnel on official company business for lodging, meals, and incidental expenses shall be considered to be reasonable and allowable only to the extent that they do not exceed on a daily basis the maximum per diem rates in effect at the time of travel as set forth in Federal Travel Regulation. Documentation to support actual costs incurred shall be in accordance with the Contractor's established practices, subject to FAR 31.205-46(a)(7), and provided that a receipt is required for each expenditure of $75.00 or more. The Government will reimburse Contractor travel under a designated Contract CLIN. For Emergency Repair Requests, the Contractor shall obtain prior written approval from the CO before making any travel arrangements.

11.3 Contracting Officer Representative (COR): The (COR) will be identified by separate letter issued by the CO. The COR monitors all technical aspects of the Contract and assists in Contract administration. The COR is authorized to perform the following functions: assure that the Contractor performs the technical requirements of the contract; perform inspections necessary in connection with contract performance; maintain written and oral communications with the Contractor concerning technical aspects of the contract; issue written interpretations of technical requirements, including Government drawings, designs, specifications; monitor Contractor's performance and notifies both the CO and Contractor of any deficiencies; coordinate availability of government furnished property, and provide site entry of Contractor personnel. A letter of designation issued to the COR, a copy of which is sent to the Contractor, states the responsibilities and limitations of the COR, especially with regard to changes in cost or price, estimates or changes in delivery dates. The COR is not authorized to change any of the terms and conditions of the Contract.

11.4 Physical Security: The Contractor shall be responsible for safeguarding all government equipment, information and property provided for Contractor use under this Contract. This Contract requires access into the Controlled Industrial Area of the BEP. The Contractor

personnel shall recognize that BEP deals with sensitive information and other proprietary information, which are valuable, special, and unique assets. All information pertinent to BEP's information technology resources is highly sensitive and may not be released to third parties without the express, written consent of BEP. This information requires strict control procedures to preclude unauthorized disclosure or dissemination. Information pertinent to personnel is protected from unauthorized disclosure under the provisions of the Privacy Act of 1974 (5 U.S.C. 552a). Contractor personnel shall not divulge, disclose, or communicate in any manner, any information to any third party without prior written consent of the BEP. Contractor personnel shall protect information and treat it as strictly confidential and will abide by the security requirements of BEP. A violation of this paragraph shall be a material violation of this Contract. Should the Contractor receive or suspect they have learned of sensitive or classified information, the Contractor shall identify and report suspicions to the COR. Contractor personnel performing work under this Contract shall be subjects of background investigations, conducted by BEP's Office of Personnel Security, prior to start of work under this Contract. Each Contractor employee performing under this Contract must successfully complete the Government required background check form at time of the proposal submission and must maintain the level of security required for the life of the Contract.

11.5 Identification of Contractor Employees: All contract personnel attending meetings, answering Government telephones, and working in other situations where their Contractor status is not obvious to third parties are required to identify themselves as such to avoid creating an impression in the minds of members of the public that they are Government officials. They must also ensure that all documents or reports produced by Contractors are suitably marked as Contractor products or that Contractor participation is appropriately disclosed. All Contractor personnel shall clearly identify themselves as a Contractor and shall be required to wear identification (ID) badges in a visible location on the front of exterior clothing, above the waist, (except when safety or health reasons prevent such placement). ID badges shall be worn at all times when performing work. ID badges shall have an identification picture and shall state the name of the individual and the company they represent. Contractor personnel are prohibited from possessing weapons, firearms or ammunition, on themselves or within their Contractor-owned or privately owned vehicle while on BEP premises.