

**CITY OF PORT ST. JOE, FLORIDA  
NOTICE TO RECEIVE SEALED BIDS  
RFP 2021-17  
Renovations and Repairs of Cape San Blas Lighthouse**

Sealed bids for the City of Port St. Joe for Renovations and Repairs of Cape San Blas Lighthouse, will be received at City Hall, 305 Cecil G. Costin, Sr., Blvd., Port St. Joe, Florida 32456 up until 3:00 PM EST, Friday, February 4, 2022. Bids will be publicly opened and acknowledged, Friday, February 4, 2022, at 3:05 PM EST, at City Hall.

Bids shall be submitted in a sealed envelope, plainly marked with bidder's name, address, date and time of opening, and "RFP 2021-17, for Renovations and Repairs of Cape San Blas Lighthouse." Specifications are listed on the City's website at [WWW.cityofportstjoe.com](http://WWW.cityofportstjoe.com)

**DESCRIPTION OF WORK:**

A complete bid package is available on the City's website at [www.cityofportstjoe.com](http://www.cityofportstjoe.com)

For questions concerning this Bid, please contact Charlotte Pierce, City Clerk, at 850-229-8262.

The City of Port St. Joe reserves the right to accept or reject any and all Statements of Bids in whole or in part, to waive informalities in the process, to obtain new Statements of Bids, or to postpone the opening pursuant to the City's purchasing policies. Each Statement of Bid shall be valid to the City of Port St. Joe for a period of sixty (60) days after the opening.

**The City of Port St. Joe is an Equal Opportunity, Affirmative Action, and Drug Free Work Place Employer.**



# CAPE SAN BLAS LIGHTHOUSE

## RENOVATIONS AND REPAIRS

FOR  
THE CITY OF PORT ST. JOE

PROJECT MANUAL  
100% SUBMITTAL

NOVEMBER 1, 2021

ARCHITECTURE - INTERIOR DESIGN - BUILDING ENVELOPE

CAPE SAN BLAS LIGHTHOUSE  
RENOVATIONS AND REPAIRS  
CITY OF PORT ST. JOE  
MLD PROJECT. NO. 154021

INDEX - TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01 11 00 - SUMMARY OF THE WORK  
SECTION 01 21 20 – MATERIALS AND EQUIPMENT  
SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES  
SECTION 01 31 13 – PROJECT COORDINATION  
SECTION 01 73 29 – CUTTING AND PATCHING

DIVISION 2 – EXISTING CONDITIONS

SECTION 02 83 00 – LEAD REMEDIATION

DIVISION 5 – METAL

SECTION 05 52 00 – HANDRAILS AND RAILINGS

DIVISION 9 – FINISHES

SECTION 09 90 00 – PAINTING AND COATING

END OF TECHNICAL INDEX

## SECTION 01 11 00 - SUMMARY OF THE WORK

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

#### 1.2 PROJECT/WORK IDENTIFICATION:

- A. General: Project name is Cape San Blas Lighthouse Renovations and Repairs, City of Port St. Joe, Tallahassee Florida as shown on the Contract Documents prepared by MLD Architects, LLC. 211 John Knox Road, Suite 105, Tallahassee, Florida, 32303 (1-850-385-9200).
- B. Contract Documents: Indicate the work of the Contract and related requirements and conditions that have an impact on the project.
- C. Summary of References: Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, Drawings, addenda and modifications to the contract documents issued subsequent to the initial printing of this project manual and including but not necessarily limited to printed material referenced by any of these. It is recognized that work of the contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions and other forces outside the contract documents.
- D. Abbreviated Written Summary: Briefly and without force and effect upon the contract documents, the work of the Contract can be summarized as follows:

##### Base Bid

The scope of work includes but is not limited to various repairs, cleaning, proper preparation, priming, and painting of the lighthouse tower, including interior and exterior surfaces.

##### Additive alternate #1

Lead abatement/removal of black paint and undercoat on interior stair system, rails, platforms and landings. Chemically strip and/or blast clean all black paint from interior steel and iron surfaces.

#### 1.3 CONTRACTOR USE OF PREMISES:

- A. General: The Contractor shall limit his use of the premises to the work indicated, to allow for Owner occupancy and operations of adjacent property.
- B. Use of the Site: Confine operations at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.

1. Keep existing driveways and entrances serving the premises clear and available to the Owner and his employees, at all times. Do not use these areas for parking or storage of materials.
2. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas agreed upon. If additional storage is necessary, obtain and pay for such storage off site.
3. Lock automotive type vehicles, such as passenger cars and trucks and other mechanized or motorized construction equipment, when parked and unattended, to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.

1.4 OWNER OCCUPANCY:

- A. Full Owner Occupancy: The Owner will occupy the adjacent operation areas and facilities, on the site. Cooperate fully with the Owner or his representative during construction operations to minimize conflicts, maintain safe conditions and to facilitate Owner usage. Perform the work so as not to interfere with the Owner's operations.

1.5 ALTERATIONS AND COORDINATION:

- A. General: The work of this Contract includes coordination of the entire work of the project, including preparation of general coordination drawings, diagrams and schedules, and control of site utilization, from beginning of construction activity through project close-out and warranty periods.
- B. Alterations: Where applicable, requirements of the contract documents apply to alteration work in the same manner as to new construction.
- C. All work shall comply with the Florida Building Code 7th Edition 2020

1.6 MISCELLANEOUS PROVISIONS:

- A. Mechanical/Electrical Requirements of General Work:
  1. General: Except as otherwise indicated, comply with applicable requirements of Division-15 sections for mechanical provisions within units of general (Division 2-14) Work. Except as otherwise indicated, comply with applicable requirements of Division-16 sections for electrical provisions within units of general (Division 2-14) Work.
  2. Service Connections: Refer to Division-23 and Division-25 sections for the characteristics of the mechanical and electrical services to be connected to units of general work. Provide units manufactured or fabricated for proper connection to and utilizations of available services, as indicated. Except as otherwise indicated, final connection of mechanical services to general work is defined as being mechanical work, and final connection of electrical services to general work is defined as electrical work.

3. Plumbing, sewer and water tap fees shall be paid by the Contractor.

B. Performance Requirements for Completed Work:

1. General: The Contract Documents indicated the intended occupancy and utilization of the building and its individual systems and facilities. Compliance with governing regulations is intended and required for the work and for the Owner's occupancy and utilization.

END OF SECTION 01 11 00

## SECTION 01 21 20 - MATERIALS AND EQUIPMENT

### GENERAL:

### STANDARDS:

Reference to standards, codes specifications, recommendations and regulations: refer to the latest edition of printing in effect at the date of issue shown in the Documents, unless other date is implied by the suffix number of the standard.

Applicable portions of the standards listed that are not in conflict with the Contract Documents shall be constructed as Specifications for this work.

Specified variations from the standards listed shall be constructed as amendments and the unaltered portions of the Standards shall remain in full effect.

In cases of discrepancies or variations between the listed Standards, the more stringent requirements shall govern.

Keep at the site not less than one copy, in good condition, of the standards specifically indicated as the methods for applying, installing, connecting and erecting. Inform involved personnel as to the requirements and availability of the standards.

### DELIVERY AND STORAGE:

Schedule deliveries and unloading to prevent traffic congestion, blocking of access and interference with work. Arrange deliveries to avoid larger accumulations than can be suitably stored at site.

Pack and handle material to prevent damage during loading, delivering and storing.

Deliver packaged materials to site in manufacturer's original, unopened, labeled containers. Do not open containers until approximate time for use.

Store materials at locations that will not interfere with progress of work. Arrange locations of storage areas in approximate order of intended use.

Do not store materials on the roof.

Store materials in a manner that will prevent damage to materials or structure, and that will prevent injury to persons.

STORING AREAS:

The Owner will make available limited storage areas on the building site. At the start of the operation, make arrangements with the Owner's representative for the assignment of the areas. During construction maintain the areas in a neat condition.

Parking of private cars is not permitted on the property of the Owner. Notify employees and Subcontractors of this requirement at the beginning of work.

MANUFACTURER'S DIRECTIONS:

Apply, install, connect and erect manufactured items or materials according to the recommendations of the manufacturer when such recommendations are not in conflict with the Contract Documents.

Furnish to the Architect in request, copies of the manufacturer's recommendations. Secure approval of recommendations before proceeding with work.

Keep at site not less than one copy, in good condition, of manufacturer's recommendations or directions pertaining to work at the site. Inform involved personnel of requirements and availability of manufacturer's recommendations.

END OF SECTION 01 21 20



## SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
  - 1. Division 1 Section "Unit Prices" for administrative requirements for using unit prices.

#### 1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within 14 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Include costs of labor and supervision directly attributable to the change.
  5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  6. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

## 1.5 ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
1. Include installation costs in purchase amount only where indicated as part of the allowance.
  2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
  3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
  4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within 14 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 14 days after such authorization.
1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
  2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Work Change Directive: Architect may issue a Work Change Directive on AIA Document G714. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

## SECTION 01 31 13 - PROJECT COORDINATION

### PART 1 - GENERAL

#### RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

#### SUMMARY

This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:

- Coordination.
- Administrative and supervisory personnel.
- General installation provisions.
- Cleaning and protection.

Requirements for the Contractor's Construction Schedule are included in Section "Submittals".

#### COORDINATION AND MEETINGS

General: Prepare a written memorandum on required coordination activities. Include such items as required notices, reports and attendance at meetings. Distribute this memorandum to each entity performing work at the project site. Prepare similar memoranda for separate contractors where interfacing of their work is required.

Monthly Coordination Meetings: Hold monthly general project coordination meetings at regularly scheduled times convenient for all parties involved. These meetings are in addition to specific meetings held for other purposes, such as regular project meetings and special preinstallation meetings. Request representation at each meetings by every party currently involved in coordination or planning for the work of the entire project. Conduct meetings in a manner which will resolve coordination problems. Record results of the meeting and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.

Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.

Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.

Make adequate provisions to accommodate items scheduled for later installation.

Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.

Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.

Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

- Preparation of schedules.
- Installation and removal of temporary facilities.
- Delivery and processing of submittals.
- Progress meetings.
- Project Close-out activities.

Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.

Salvage materials and equipment involved in performance of, but not actually incorporated in, the work. Refer to other sections for disposition of salvaged materials that are designated as Owner's property.

## SUBMITTALS

Coordination Drawings: Prepare and submit coordination Drawings where close and careful coordination is required for installation of products and materials fabricated off-site by separate entities, and where limited space availability necessitates maximum utilization of space for efficient installation of different components.

Comply with requirements contained in "Submittals" of each specification section.

Refer to Division-15 Section "Basic Mechanical Requirements," and Division-16 Section "Basic Electrical Requirements" for specific coordination Drawing requirements for mechanical and electrical installations.

Staff Names: Within 15 days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses and telephone numbers.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

## GENERAL INSTALLATION PROVISIONS

Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have

been corrected in an acceptable manner.

Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.

Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.

Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.

Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.

Recheck measurements and dimensions, before starting each installation.

Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.

Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.

Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

#### CLEANING AND PROTECTION

During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

END OF SECTION 01 31 13

## SECTION 01 73 29 - CUTTING AND PATCHING

### PART 1 - GENERAL

#### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

#### DESCRIPTION OF REQUIREMENTS:

Definition: "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.

"Cutting and patching" is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed or for other similar purposes.

Cutting and patching performed during the manufacture of products, or during the initial fabrication, erection or installation processes is not considered to be "cutting and patching" under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be "cutting and patching".

Refer to other sections of these specifications for specific cutting and patching requirements and limitations application to individual units of work.

Unless otherwise specified requirements of this section apply to mechanical and electrical work. Refer to Division-15 and Division-16 sections for additional requirements and limitations on cutting and patching of mechanical and electrical work.

#### QUALITY ASSURANCE:

Requirements for Structural Work: Do not cut and patch structural work in a manner that would result in a reduction of load-carrying capacity or of load-deflection ratio.

Operational and Safety Limitations: Do not cut and patch operational elements or safety related components in a manner that would result in a reduction of their capacity to perform in the manner intended, including energy performance, or that would result in increased maintenance, or decreased operational life or decreased safety.

Visual Requirements: Do not cut and patch work exposed on the building's exterior or in its occupied spaces, in a manner that would, in the Architect/Engineer's opinion, result in lessening the building's aesthetic qualities. Do not cut and patch work in a manner that would result in substantial visual evidence of cut and patch work. Remove and replace work judged by the Architect/ Engineer to be cut and patched in a visually unsatisfactory manner.

## PART 2 - PRODUCTS

### MATERIALS:

General: Except as otherwise indicated, or as directed by the Architect/Engineer, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics.

## PART 3 - EXECUTION

### INSPECTION:

Before cutting, examine the surfaces to be cut and patched and the conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

### PREPARATION:

Temporary Support: To prevent failure provide temporary support of work to be cut.

Protection: Protect other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.

Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

Take precautions not to cut existing pipe, conduit or duct serving the building but scheduled to be relocated until provisions have been made to bypass them.

### PERFORMANCE:

General: Employ skilled workmen to perform cutting and patching work. Except as otherwise indicated or as approved by the Architect/Engineer, proceed with cutting and patching at the earliest feasible time and complete work without delay.

Cutting: Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible review proposed procedures with the original installer; comply with original installer's recommendations.

In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as a carborundum saw or core drill to insure a neat hole. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.



Temporarily cover openings when not in use.

Comply with requirements of applicable sections of Division 2 where cutting and patching requires excavating and backfilling.

By-pass utility services such as pipe and conduit, before cutting, where such utility services are shown or required to be removed, relocated or abandoned. Cut-off conduit and pipe in walls or partitions to be removed. After by-pass and cutting, cap, valve or plug and seal tight remaining portion of pipe and conduit to prevent entrance of moisture or other foreign matter.

Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

Where feasible, inspect and test patched areas to demonstrate integrity of work.

Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

Where removal of walls or partitions extends one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to achieve uniform color and appearance, remove existing floor and wall coverings and replace with new materials.

Where patch occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received prime and base coat.

Patch, repair or rehang existing ceilings as necessary to provide an even plane surface of uniform appearance.

#### CLEANING:

Thoroughly clean areas and spaces where work is performed or used as access to work. Remove completely point, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

END OF SECTION 01 73 29

## SECTION 02 83 00 – LEAD REMEDIATION

### PART I - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division specifications apply to this Section.

#### 1.2 SUMMARY

- A. This section specifies the requirements for lead abatement and surface preparation for repainting. It includes preparation of the work areas including construction of decontamination units, lead-based paint removal, cleanup and decontamination, final clearance and disposal of lead contaminated materials.

#### 1.3 QUALITY CRITERIA

- A. Maintain on site a full-time superintendent who is experienced in administration and supervision of lead abatement projects. Submit superintendent qualifications to Consultant for review and approval. A project superintendent cannot be changed without prior approval of the Consultant.
- B. Provide one experienced job foreman to remain inside each work area at all times lead-based paint removal workers are working in the area.
- C. Utilizing own work force, Contractor shall provide only trained and experienced lead removal workers to perform the work.
- D. Provide one certified employee who has receiving training in the provisions of current lead regulations. This employee must be present at the work site at all times.
- E. Maintain a minimum of one complete copy of specifications on site at all times.

#### 1.4 WORKSITE CONDITIONS

- A. Worker and Visitor Procedures: The Contractor is hereby advised that lead has been determined by the U.S. Government to be a health hazard, and Contractor shall provide workers and visitors with protective clothing which as a minimum shall meet the requirements of OSHA 29 CFR 1926.62 and 1910.125.
- B. Visitors entering the regulated area will comply with all the protective equipment, respirator, and decontamination requirements of this specification. Visitors will be required to supply their own respiratory protection equipment. Respirators used by visitors must be of a type suitable for the conditions present in the regulated area. Visitors who enter the regulated area will be required to submit to the Consultant a current fit test certificate, a respirator training certificate, and a physicians evaluation for respirator use.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Disposal Bags: Provide 6 mil thick leak tight polyethylene bags labeled in accordance with OSHA 1910.1200.
- B. TSP Solution: Tri-sodium phosphate solution of greater than 5% used to remove lead dust residue.

### 2.2 EQUIPMENT

- A. Airless Sprayer: Provide motor driven airless sprayer capable of applying TSP Solution. Size nozzle to provide a mist application of solution without excessively disturbing existing materials.
- B. Water Filters: Unless all waste water is to be disposed of as lead-containing, provide filter units on all drain lines & any other water source carrying water from the work area. Provide progressive filter system with the final filter passing particles one-micron or less.
- C. Garden Sprayer: Provide a hand pump type pressure - can garden sprayer equipped with a wand at the end of a hose that can deliver a stream or spray of liquid.
- D. HEPA Filtered Vacuum cleaners: Provide vacuums equipped with high efficiency particulate air filters.
- E. Containerization: Provide 55 gallon metal drums with heavy duty tops for collection, storage and disposal of all lead dust and lead contaminated wastes. Tops shall contain lockable slip ring.

## PART 3 - EXECUTION

### 3.1 GENERAL

- A. Isolate from work area all air handling systems.
- B. Shut down and lock out all air handling systems supplying air to, from or through work area.
- C. Decontaminate all moveable items, using HEPA vacuums and wet methods, and remove from work area.
- D. Warning signs shall be displayed at all entrances and approaches to the regulated area. Warning signs must comply with the requirements of OSHA 29 CFR 1926.62(m). The Contractor is responsible for ensuring that all building occupants and non-English speaking employees are able to comprehend the warning sign. When necessary, the Contractor will display signs in foreign languages, pictographs, and graphics. Signs such as these will be in addition to warning signs in English.
- E. Construct worker and equipment/disposal decontamination units in accordance with EPA and OSHA guidelines and regulations. Refer to Drawing A-1. Separate decontamination areas are required for personnel and equipment. Provide both hot and cold water for personnel shower. Trap and filter all wastewater using a progressive stage filter system.
- F. Provide temporary power and lighting to work area. Install ground fault circuit interrupters on all temporary circuits.
- G. Maintain a hard bound project log book at the entrance to the regulated area. Record the name, social security number, employer, date, time-in time-out, and the purpose of entry into the regulated area. Emergency telephone numbers must be recorded inside the front cover.
- H. Notify Consultant for observation of work area prior to beginning removal.

### 3.2 CONVENTIONAL CONTAINMENT

- A. Cover all floors, walls, ceilings, etc. within the work area which do not contain surfaces or components to be abated with two layers of 6 mil plastic sheeting, turning up walls a minimum of 16 inches. Glue and tape all seams. Maintain a minimum of three feet overlap between seams at floor protection.
- B. Construct a containment that will provide adequate protection against the release of airborne lead dust, solid or liquid waste into the atmosphere or areas outside of the containment. All dust, water, paint chips, etc. generated shall be collected within the containment and shall not be allowed to penetrate or escape the boundaries of the containment.
- C. Where existing hard walls do not exist, provide support to plastic sheeting, as necessary,

to insure integrity of the containment system. In providing support or reinforcement for plastic sheeting, do not anchor or attach the support to the existing building in any manner that would damage or mar the existing building without prior approval of the Architect.

- D. Place work area under negative air pressure utilizing HEPA filtration systems. Maintain negative air pressure in the regulation area continuously from the start of lead paint removal until successful completion of final clearance air testing. Maintain a negative pressure of at least 0.02 inches of water column. The exhaust of all negative air machines must be discharged to the outside of the building.
- E. Protect floors and install sumps as necessary to prevent liquid waste from leaking from containment area and to facilitate waste isolation and collection.
- F. In addition to the above requirements, two spare HEPA filtration air movement machines will be kept at each project location. One inside the regulated area for use in the event of equipment failure, filter changes, and other maintenance. One outside the regulated area for emergency use.

### 3.3 LEAD-BASED PAINT REMOVAL METHODS

- A. Remove and dispose of lead containing materials in accordance with OSHA and all other applicable regulations.
- B. Utilize mechanical methods as necessary to remove lead-based paint without unnecessary damage to substrate.
- C. All power tools, sanders, brushes, etc, shall contain HEPA filtered dust collection systems.
- D. All needle guns or welding torch cutting work shall incorporate the use of HEPA filtered ventilation.

### 3.4 METHODS FOR REMOVAL OF LEAD-BASED PAINTED COMPONENTS

- A. Place one layer of 6 mil plastic sheeting on floor in area where components are to be removed.
- B. Carefully remove component in whole section.
- C. Utilize procedures which minimize any damage to paint or component and/or components that will remain in place.
- D. Components that are removed shall be wrapped in a minimum of 2 layers of 6 mil plastic sheeting and properly disposed of in accordance with the requirements of this section.

### 3.5 LEAD DUST HAZARD CLEANUP METHODS

- A. Wet clean with TSP solution and HEPA vacuum all surfaces until work area is free of all

visible debris.

- B. Clean and remove from work area all equipment (if not required for further use), materials, impermeable containers, etc.
- C. Notify Owners Hazardous Materials Consultant for visual observation and approval to determine completeness.
- D. Notify Owners Hazardous Materials Consultant to perform Clearance Surface Dust Testing.
- E. Reclean at Contractor's expense, work areas which do not meet specified final clearance lead surface dust concentration levels.
- F. Dismantle and remove, decontamination chamber, and any other materials not previously removed. Thoroughly wet clean work area.
- G. Remove all traces of tape adhesive, and staples. Repair or make good any damaged caused through abatement operations.
- H. Notify Consultant for work area observation and approval to determine completeness.

### 3.6 DISPOSAL OF CONTAMINATED WASTE

- A. All plastic bags and plastic sheeting used for disposal of lead-contaminated material shall be labeled in accordance with OSHA, EPA and DOT regulations. Seal lead dust and lead-contaminated waste in impermeable containers labeled in accordance with EPA and OSHA regulations.
- B. Disposal of lead-containing materials and lead-contaminated waste: As the work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labeled containers of lead contaminated waste and dispose of such containers at an authorized disposal site in accordance with the requirements of the disposal authority. Submit documentation regarding disposal to Owner.
- C. Hauling: Transportation methods shall comply with the provisions of EPA Title 40 Part 61 Subpart M, Department of Transportation Title 47 CFR part 172 and with any State of Florida hazardous waste regulations.
- D. Wastes are defined as all lead-containing or potentially contaminated materials or other items that have not been completely cleaned to the satisfaction of the Project Representative. Lead wastes may include dust, debris, building materials, mechanical equipment, chips, towels, rags, disposable clothing, and protective equipment, plastic sheeting and tape, exhaust system or vacuum filters, unfiltered water, contractor equipment, or other materials designated by the state or local authorities or the Project Representative. Any and all material, equipment and supplies potentially containing or contaminated with lead, lead dust, or lead particulates is considered and must be treated and disposed of as lead waste.

- E. Categorize all waste streams into separate classifications.
- F. Perform TCLP testing on all waste classifications. All costs associated with waste classification and disposal shall be by Contractor.
- G. Solid waste which has been evaluated and determined not to be hazardous can be disposed in State approved landfill.

END OF SECTION 02 83 00

## SECTION 05 52 00 - HANDRAILS AND RAILINGS

### GENERAL

#### 1.1 SECTION REQUIREMENTS

- A. Submit Product Data and Shop Drawings.

### PART 2 - PRODUCTS

#### 2.1 METALS

- A. Aluminum Plates, Shapes, and Bars: ASTM A 36 (ASTM A 36M).
- B. Aluminum Pipe: ASTM A 53, Schedule 40.
- C. Aluminum Tube: ASTM A 500 or ASTM A 501.
- D. Aluminum Castings: ASTM A 48, Class 30 (ASTM A 48M, Class 200).

#### 2.2 RAILING SYSTEMS

- A. Handrail and guard rails shall comply with requirements of the 2020 Florida Building Code section 1608.2 and 1608.2.2.

#### 2.3 FABRICATION

- A. Assemble railing systems in shop to the greatest extent possible. Use connections that maintain structural value of joined pieces.
- B. Form changes in direction of railing members **by bending or by mitering at elbow bends.**
- C. Fabricate railing systems and handrails for connecting members **by welding.**
- D. Manufacturer's standard wall brackets, flanges, miscellaneous fittings, and anchors to connect handrail and railing members to other construction.
- E. Wall returns at ends of wall-mounted handrails.



## 2.4 FINISHES

- A. Clean and shop prime aluminum railings for field painting.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Fit exposed connections accurately together to form tight, hairline joints.
- B. Set handrails and railings accurately in location, alignment, and elevation and free from rack.
- C. Attach handrails to wall with wall brackets.

END OF SECTION 05520

## SECTION 09 90 00 – PAINTING AND COATING

### 1.1 GENERAL

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and division - 1 Specification sections, apply to the work specified in this section.
- B. Submittals: In addition to manufacturer's data, application instructions, and label analysis for each coating material, submit samples for Architect's review of color and texture only.
- C. Description of Work: Painting and finishing of exterior ferrous metal items and surfaces, and existing surfaces indicated in the drawings, damaged and/or patched as a result of work of this contract.
  - 1. Paint exposed surfaces indicated.
- D. Work Not Included: Unless otherwise indicated, shop priming of ferrous metal items and fabricated components are included under their respective trades. Prefinished items are not included, unless otherwise indicated. Finished metals such as anodized aluminum, stainless steel, bronze and similar metals will not be painted, unless otherwise indicated. Do not paint any moving parts of operating units, or over any equipment identification, performance rating, name or nomenclature plates or code-required labels.
- E. Delivery and Storage: Deliver materials to job site in new, original, and unopened containers bearing manufacturer's name, trade name, and label analysis. Store where indicated in accordance with manufacturer's instructions.
- F. Job Conditions: Do not apply paint in snow, rain, fog or mist or when relative humidity exceeds 86%. Do not apply paint to damp or wet surfaces.
- G. Protection: Protect existing materials and work of other trades. Correct any painting related damages by cleaning, repairing or replacing, and refinishing, as directed by Architect.
- H. Coordination: Provide finish coats which are compatible with prime paints used. Provide barrier coats over incompatible primers where required.
- I. Surface Preparation: Perform preparation and cleaning procedures in strict accordance with coating manufacturer's instructions for each substrate condition.
  - 1. Remove hardware and accessories, machined surfaces, plates and similar items in place and not to be finish-painted or provide surface-applied protection. Reinstall removed items and remove protective coverings at completion of work.
- J. Ferrous Metal Surfaces: Clean ungalvanized ferrous metal surfaces; remove oil, grease, dirt, loose mill scale and other foreign substances. Use solvent or mechanical cleaning methods that comply with the recommendations of the Steel Structures Painting Council.

1. Clean and prepare surface profile in accordance with applicable SSPC specifications: SSPC-SP 2 Hand Tool Cleaning, SSPC-SP 3 Power Tool Cleaning, SSPC-SP 6 Commercial Blast Cleaning, SSPC-SP 7 Brush off Blast Cleaning, SSPC-SP10 Near-White Blast Cleaning, and SSPC-SP11 Power Tool Cleaning to Bare Metal.
    - a. Minimum degree of surface preparation for each coating system shall be as indicated in the schedule by the applicable SSPC specification number and in the drawings.
    - b. Where no SSPC specification number is indicated, prepare surfaces in accordance with SSPC-SP 2 Hand Tool Cleaning, or SSPC-SP 3 Power Tool Cleaning.
  2. Before hand or power tool cleaning, remove visible oil, grease, soluble welding residue, and salts by SSPC-SP 1 Solvent Cleaning. After hand or power tool cleaning, reclean surfaces if necessary.
- K. Material Preparation: Mix, prepare and store painting and finishing materials in accordance with manufacturer's directions.
- L. Application: Apply painting and finishing materials in accordance with manufacturer's directions. Use applicators, and techniques best suited for materials and surfaces to which applied.
  1. Apply additional coats when undercoats, or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.
  2. All painting over existing painted areas shall be a minimum 2 coat application with a total new film thickness of not less than 1.5 mils.
  3. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces.
  4. Apply each material at not less than manufacturer's recommended spreading rate.
- M. Completed Work: Match existing adjacent surfaces for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.

## 2.1 EXTERIOR PAINT SYSTEMS:

- A. Provide the following paint systems for the various substrates, as indicated.
- B. Coating System
  1. Area: Previously painted steel,
  2. Surface Preparation:
    - a. NACE RP-01-72 Water blasting and hand sanding SSPC-SP 2 Hand Tool Cleaning
    - b. SSPC-SP 1 Solvent Cleaning or Power Wash
    - c. SSPC-SP 2 Hand Tool Cleaning/Hand Sanding
    - d. SSPC-SP 3 Power Tool Cleaning Rusted Areas

Coat 1 – Exterior prime coat: S-W Galvapak - Zinc  
Intermediate coat: S-W Macropoxy 646  
Top/finish coat: S-W Acrolon 218

Coat 2 – Interior stair system and gallery floor platforms  
Prime coat: S-W Galvapak – Zinc  
Top/finish coat (base bid): S-W Acrolon 218 (additional millage required for one coat application)  
2nd top/finish coat (PART OF ALT. 2): S-W Acrolon 218

Coat 3 – Interior white cylinder shaft walls and lantern room ceilings  
Primer: S-W Zinc/Clad primer / DTM acrylic primer  
Top/finish coat (Base Bid): S-W Sher-Cryl HPA (additional milage required for one coat application)

2nd Top/Finish Coat (Part of Alt. 1): S-W Sher-Cryl HPA

END OF SECTION 09 90 00