#

# DEPARTMENT OF HOMELAND SECURITY

# UNITED STATES COAST GUARD YARD

**SPECIFICATIONS TO**

**FRONT GATE BARRIERS**

**PROJECT NUMBER: 13462289**

**U.S. COAST GUARD YARD BALTIMORE, MARYLAND**

***MAY 2020***

# COMMANDING OFFICER

# UNITED STATES COAST GUARD YARD

# BUILDING 4 MAIL STOP 10 2401 HAWKINS POINT ROAD

**BALTIMORE, MARYLAND 21226**

AUTHOR: LT Avery Weston

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DIVISION 1

SECTION 01 11 00 SCOPE OF WORK

* 1. GENERAL
	2. WORK INCLUDES
		1. The Contractor shall provide all labor, equipment, materials, and supervision necessary to complete the work described herein. Unless otherwise stated, the Contractor shall execute the work in accordance with all applicable federal, state, and local codes, regulations, and laws. Contractor shall field verify all existing conditions.
		2. Major items of work shall include the following items: **of bituminous concrete pavement, concrete curbs**
			1. LANDSCAPING WORK
				1. Provide professional landscape services to ensure all pedestrian paths, bicycle lanes, and entrance to CG Yard is aesthetically pleasing. Consideration should be made to install natural shrubs/plants/trees to ensure healthy growth appropriate of the intended use and climate.

* + - 1. DEMOLITION WORK
				1. Remove and properly dispose of the existing of bituminous concrete pavement, concrete curbsbituminous concrete pavement, and concrete curbs 1.2 Provide earthwork excavation for new bituminous concrete of bituminous concrete pavement, concrete curbsof bituminous concrete pavement, concrete curbs of bituminous concrete pavement, concrete curbs of bituminous concrete pavement, concrete curbs of bituminous concrete pavement, concrete curbs bituminous concrete pavement, concrete curbswithin the limits of demolition as indicated in the contract drawings. Bollards around guard shack (building 82) shall be removed and replaced with similar color, make, and model. Traffic signs around building 82 shall be replaced/renewed with more directive signage that conforms to MUTCD.
				2. Remove and properly dispose of no longer used equipment on Bldg 82, which includes the DirecTV satellite dish.
				3. Remove existing pedestrian gates. Work shall be coordinated that there will not be a security gap between demolition and install of the new pedestrian gates. During this period, the contractor shall install temporary security measures approved by the security officer to protect against intruders. Work shall be coordinated so that there will be a pedestrian entrance usable for CG Yard security during construction.
				4. Demolish vehicle scale, associated equipment, and pit floor. Approximately 12’ W x 36’ L x 6’ D.
			2. NEW WORK
				1. Install permeable pavers in the location of the demolished vehicle scale for bicycle parking. Fill with crushed aggregate to provide a foundation in accordance with the manufacture’s recommended installation procedures which are the ICPI installation guidelines for permeable pavers. Install Nicolock Eco-Ridge pavers on top of the installed foundation in the location of the demolished vehicle scale.
				2. Paint and prepare bicycle traffic lanes to the bicycle parking area. Paint the bike lane green with skid resistant and retro-reflective paint. The bicycle symbol and arrow marking shall be used to define the bike lanes towards the parking area in accordance with MUTCD Figure 9C-3.
				3. Install natural shrubs/ornamental planters to enclose the bicycle parking area. This shall provide a minimum of 5’ vertical cover from the road to aesthetically enclose the bicycle parking area. Bicycle rack capacity should be designed for 50 bicycles. Government shall provide bicycle parking racks. Install bicycle parking signs. The bicycle parking sign shall be a minimum of 12” x 18” and clearly direct bicycle traffic to parking.
				4. Install pedestrian lanes to CG Yard 48” or greater. This shall consist of painting the pedestrian lane green with skid resistant and retro-reflective paint. The pedestrian symbol and arrow markings shall be used to define the pedestrian lanes. All paintings and symbols shall be in accordance with Manual on Uniform Traffic Control Devices (MUTCD). This shall extend from the rail road tracks outside the front gate to the intersection of Bungalow Avenue and Ross Avenue (approximately 100’).
				5. Install pedestrian sign directing pedestrian lane traffic to pedestrian turnstile entrance as primary entrance.
				6. Install (Qty: 1) two-way pedestrian turnstile gate with CAC reader. The pedestrian turnstile gate shall be installed in the current swing gate on the West side of Bldg 82A; All arm and barrier tubing must be 1¾ in diameter (14-gauge), have an exterior height of 7 ft -7 in. and a walk-through height of 7 ft. Turnstiles must rotate in a counter-clockwise direction and must be 5 ft in diameter. Turnstile gate access control systems must be HSPD-12 / FIPS-201 compliant and must be evaluated and approved by the COR, LT Avery Weston prior to ordering and installing. Electric motors which turn the gate either continuously or on demand are not permitted. Electrical specifications for the pedestrian turnstile gate shall be 240 VAC / 1.2A / 50Hz/60Hz. The pedestrian turnstile shall have daylight visible indicator lights, bi-directional key overrides, lockout bar, and battery backup. Pedestrian turnstile gate CAC reader shall be listed under GSA Approved Products list for identity management and is designed for outside use. <https://www.idmanagement.gov/approved-products-list-pacs-products/>
				7. Install (Qty: 1) one pedestrian swing gate that shall be installed in the current Rapid Gate pedestrian entrance (East side of Bldg 82A). It shall be ornamental steel or aluminum material. Pedestrian swing gate must be at least 8 ft in height, which includes a 1 ft vertical top guard and must swing inward toward the secure area. Swing gate must be HSPD-12 / FIPS-201 compliant and must be evaluated and approved by the COR, LT Avery Weston prior to ordering and installing. The pedestrian swing gate shall have daylight visible indicator lights, bi-directional key overrides, lockout bar, and battery backup. Pedestrian swing gate CAC reader shall be listed under GSA Approved Products list for identity management and is designed for outside use. <https://www.idmanagement.gov/approved-products-list-pacs-products/>
				8. Install (1) inbound Solar-powered LED STOP AT GATE sign that is capable of operating in flash, or steady mode. During flash-mode, the rate shall be more than 50 and less than 60 times per minute. The stop sign shall be at a minimum 36” x 36” and located North of Building 82 Gate House for inbound traffic. The sign shall have
				9. Install (2) exterior floodlights mounted on top of Building 82A. The lighting shall not be spotlight restricting vision of pedestrians or vehicles. The fixtures and components shall be weatherproofed with LED. The lighting shall have photocell capability to turn the electric lights on and off as the sun rises/sets. The lighting shall have the capability to be turned to motion detector setting. The intensity shall be a minimum of 5,000 lumens. The lights shall have dimming switch capability. Dual-control enabled for automatic nighttime on/daytime off ensuring efficient energy usage.
				10. Replace existing light under Building 82A’s shelter with LED floodlights. Light switch shall utilize existing electrical run and switch.
				11. OPTION ITEM 1: Resurface Building 82 Gate House floor with a skim surface coat and acid stain. Approximately 80 square feet.
				12. OPTION ITEM 2: Install (Qty: 1) TV Wall Mount for security monitors.
				13. Replace Building 144 “POLICE” blue canopy with a new canopy that matches the existing color and title.
				14. Install (1) inbound vehicle rising arm entry barrier and (1) outbound vehicle rising arm exit barrier in the location depicted in the drawings. Length of arm shall be approximately 10’. The barrier arms shall be rated for 500 cycles per hour, arm speed of 1.5 - 4 seconds (field adjustable open/close time), full open angle is adjustable to 90 degrees, arm design shall be red and white reflective marking for visibility. The rising arm barrier shall be operable remotely by the guard in Building 82 Gate House. Contractor shall instruct CG Yard facilities department on operation and maintenance.
				15. Provide new bituminous concrete pavement overlay. The new asphalt area shall consist of a bituminous concrete wearing course. The new pavement area is approximately 6200 square feet.
				16. Paint streets, curbs, and sidewalks to match existing and in accordance with MUTCD within the limits of the drawings.
				17. Provide new concrete curbs and concrete walls as required.
				18. Provide site electrical work. Install electrical connection (240/120VAC, 60/50 Hz) to vehicle drop-arm barriers in accordance with the vehicle drop-arm barrier specifications. All electrical work shall be done in accordance with the latest edition of the National Electric Code. The contractor shall furnish all brackets, steel frames, raceways, connectors, couplers, boxes, fittings, and all hardware required to complete the indicated installation. Work to include: connecting to an exterior electric breaker panel, and installing new concrete foundations and relocating the controls for the north gate. This includes all required equipment, wiring, conduit, connectors, etc.

**Provide earthwork excavation for new bituminous concrete pavement.**

* 1. Work associated with these items is described in the following specification sections and/or are shown on the contract drawings. Incidental work items not listed above and necessary for completing the project shall be included.
	2. **Contractor shall sequence/limit work to one traffic lane at a time so that there is always one lane open for vehicle traffic during construction.**
	3. DRAWINGS: Drawings and the accompanying specifications are the property of the Government and comprise legal documentation that pertains exclusively to this project. Drawings will be made available in a format determined by the solicitation method. CEU Cleveland will not provide hard copies of drawings.
	4. Construction Drawings:

|  |  |  |
| --- | --- | --- |
| Sheet Number | Drawing Number | Sheet Title |
| 1 of 7 | G-01 | Title Sheet |
| 2 of 7 | C-01 | Civil Site Plan |
| 3 of 7 | C-02 | Bicycle Parking |
| 4 of 7 | C-03 | Entrance Elevation  |
| 5 of 7 | C-04 | Pedestrian Swing Gate |
| 6 of 7 | C-05 | Pedestrian Turnstile Gate |
| 7 of 7 | C-06 | Project Overview |

* 1. Reference Drawings:

|  |  |  |
| --- | --- | --- |
| Sheet Number | Drawing Number | Sheet Title |
| 20/21 | Y086437619S20 387-619 | SCALE HOUSE AND SCALE PIT PLANS AND ELEVATIONS |

SECTION 01 14 00 CONTRACTOR WORK HOURS

1.0 REGULAR WORK HOURS: **Accomplish primary work (that will impact traffic flow inbound or outbound shall be accomplished during off-peak unit operational hours of 9:00 a.m. to 3:00 p.m., Monday through Friday or 7:00 am to 5:00 pm Saturday and Sunday,** unless otherwise approved by the Coast Guard. Work that will not impact traffic flow inbound or outbound Coast Guard Yard may be accomplished during normal unit operational hours of 7:30 a.m. to 4:30 p.m Monday through Friday. Note any departures from these work hours on the Daily Reports.

2.0 OFF-REGULAR WORK HOURS AND HOLIDAYS: The Contractor shall provide the Contracting Officer's Representative at least forty-eight hours advance notice prior to working on Federal holidays. The Government may reject any such request without impacting the completion time of the contract.

3.0 CONTRACT COMPLETION: The Contractor shall complete work within the time frame indicated upon issuance of the Notice to Proceed. Limitations imposed by these work hours will not entitle the Contractor additional time to complete the project. Refer to FAR Clause 52.211-10 "Commencement, Prosecution and Completion of Work".

4.0 RAPIDGATE PROGRAM: US Coast Guard Yard has implemented the RAPIDGate Program for their security protocol. The Contractor shall register with RAPIDGate and obtain security passes in accordance with the instructions below prior to commencing any on site work.

# *RAPID*Gate Program Enrollment Information

**1.0 Enroll your company by calling 1-877-RAPIDGate (1-877-727-4342)**

To enroll your company in the RAPIDGate Program, please go to the following web address to fill out the enrolment forms, https://eform.rapidgate.com/ . On the enrollment forms you will need to provide your US Coast Guard Yard Sponsor Contracting Officer Representative (COR) point of contact, including a name, phone number, and e-mail address [Dave Andrese at 410-636-3618, Dave.Andrese@uscg.mil]. US Coast Guard Yard must authorize your request to participate in the RAPIDGate Program. The minimum elapsed time from company enrollment to an employee receiving his or her RAPIDGate Credential is approximately two weeks. If you would like additional information please call Eid Passport at 1-877- RAPIDGate (1-877-727-4341). A customer service representative will give you all the necessary information regarding the RAPIDGate Program.

If your company is already enrolled in the *RAPID*Gate Program at another installation, it may request access for its employees at this installation by calling 1-877-RAPIDGate (1-877-727- 4341). Once your company is approved by US Coast Guard Yard, your employee who already holds a RAPIDGate Credential may be able to use the same credentials at the additional installation.

# 2.0 Employees register at onsite registration stations.

Once your company has been approved for the enrollment and paid the enrollment fee your company will receive an email with you company’s *RAPID*Gate Company Code. Instruct your employees who need access to US Coast Guard Yard to register at the self-service registration station located at US Coast Guard Yard. Each employee should be ready to provide your company’s *RAPID*Gate company code, his or her address, phone number, date of birth, and Social Security Number. The registration station will capture the employee’s photograph for credentialing and fingerprints for identity verification.

**Assisted registration at your company’s location may be available if you have 50 or more employees to register.** Call 1-877-RAPIDGate (1-877-727-4341) for details.

# 3.0 The *RAPID*Gate Program performs background screening and credentialing.

Once your company has approved each employee for participation and paid the registration fee, the *RAPID*Gate Program performs identity authorization and background screening. Your company will be notified when qualified employees may pick up their personalized *RAPID*Gate Credentials at the US Coast Guard Yard Pass and ID. Each employee must show proof of identity by presenting one form of identification from List A, or two forms of identification from list B (next page) to retrieve their credentials.

After activating their *RAPID*Gate Credentials, employees present their credentials to request entry to US Coast Guard Yard, and must wear and display the credentials at all times while on the installation. Questions about the US Coast Guard Yard *RAPID*Gate Program should be addressed to info@rapidgate.com with the subject line RE: *RAPID*Gate Program.

# Forms of acceptable identification for picking up your credentials:

|  |
| --- |
| **List A – one needed** |
| * U.S. Passport (unexpired)
* Permanent Resident Card or Alien Registration Receipt Card (Form I-551)
* Unexpired foreign passport, with I551 stamp or attached form I-94 indicating unexpired employment authorization
* Unexpired employment authorization document that contains a photograph (Form I-766, I-688, I-688A, or I668B)
 |
| **List B – two needed** |
| * Driver’s License or ID card issued by a state
* ID card issued by federal, state, or local government agencies or entities
* School ID card with a photograph
* Voter’s registration card
* U.S. Military or draft record
* Military dependent’s ID card
* U.S. Coast Guard Merchant Mariner Card
* Native American Tribal Document
* Driver’s License issued by a Canadian government authority
* U.S. Social Security card issued by the Social Security Administration
* Certificate of Birth Abroad issued by the Department of State (Form FS-545 or DS 1350)
* Original or certified copy of a birth certificate issued by a state, country, municipal authority or outlying possession of the Unites States bearing an official seal.
* U.S. Citizen ID Card (Form I-197)
* ID Card for use of resident citizen in the United States (Form I-179)
* Unexpired employment authorization document issued by DHS (other than those listed in list A)
 |

SECTION 01 14 13

PRE-BID SITE VISITS

1.0 GENERAL: Bidders are responsible for visiting the site to field verify existing conditions and determine actual dimensions and the nature of the work required. Failure to visit the site does not relinquish the bidder from determining the extent and scope of the work required and estimating the difficulty and cost to complete the project. Requests for equitable adjustments, in either time or money, arising from failing to field verify site conditions may be denied. Provisions regarding the site visit requirements are outlined in FAR Clause 52.236-3 “Site Investigation and Conditions Affecting the Work”.

2.0 SITE VISIT: Arrange pre-bid site visits to verify existing conditions with the Coast Guard Yard Facilities Engineering POC, LT Avery Weston at (410) 636-4098. The Commanding Officer may limit hours of access or levy certain restrictions regarding visits to the site

SECTION 01 14 14

PRE-CONSTRUCTION SITE CONDITIONS

1.0 SITE CONDITION VERIFICATION: The Contractor shall verify the conditions of the existing site, equipment and facilities potentially affected by the work under this contract and photograph and/or videotape the conditions in order to document their pre-construction condition. Copies of the photos and videos shall be submitted to the Contracting Officer prior to starting work.

2.0 UTILITIES: The Contractor shall use proactive measures such as digging, metering, testing, underground utility location devices, and utility company location services to locate all underground utilities identified in the area of work at no additional expense to the Government. Additional cost of unplanned outages and repair of damaged utilities, including emergency repairs by others, not properly identified by the Contractor shall be the Contractor’s responsibility.

SECTION 01 14 16 COORDINATION

1.0 INTERFERENCE WITH COAST GUARD OPERATIONS: Accomplish work in a manner that causes minimal impact on normal operations. The Contractor shall notify the Contracting Officer’s Representative at least five working days in advance of any planned outages of water, electrical, telephone, or sanitary facilities. Notify the Contracting Officer’s Representative at least one week prior to beginning construction.

* 1. MILITARY STATION REGULATIONS:
	2. The Contractor, his employees, and subcontractors shall become familiar with and obey all station regulations. All personnel employed on the project shall keep within the limits of the work and avenues of ingress and egress, and shall not enter any other areas outside of the site of the work unless required to do so in the performance of their duties. The Contractor's equipment shall be conspicuously marked for identification.
	3. There shall be NO SMOKING in any Coast Guard building.
	4. Storage Areas: The Contracting Officer’s Representative will determine exact location and boundaries of staging areas. Under no circumstances shall materials be stored in areas that will interfere with CG Yard operations.
	5. Storm Protection: If a gale force wind warning or higher is issued, take precautions to minimize any danger to persons and protect the work and nearby Government property. Precautions shall include, but not be limited to, closings, removing loose materials, tools and equipment, from exposed locations. Remove and secure scaffolding and temporary work. Close openings in the work area if storms of lessor intensity are imminent.

SECTION 01 14 19

FIELD ADJUSTMENTS

1.0 The Contracting Officer’s Representative may authorize field adjustments. Field adjustments are those alterations that do not affect time, price, or intent of the contract documents. All field adjustments shall be documented in the Daily Reports and on the As-Built Drawings.

SECTION 01 18 14

BUILDING PERMITS

1.0 NO BUILDING PERMITS from state or local governments are required for work performed on federal property. Courtesy permits may be obtained at the Contractor's option. No payment will be made to the Contractor for any permit cost. Design changes to obtain courtesy permits, even at no cost, will not be allowed without written approval of the Contracting Officer.

SECTION 01 18 17

ENVIRONMENTAL PERMITS

1.0 Unless directed by other sections of this specification, the Contractor will not be responsible for obtaining environmental permits.

SECTION 01 26 13

REQUESTS FOR INFORMATION

* 1. SUMMARY:
		1. Section Includes: Administrative requirements for requests for information.
	2. DEFINITIONS:
		1. Request for Information: A document submitted by the Contractor requesting clarification of a portion of the contract documents, hereinafter referred to as RFI (Request for Information).
		2. Proper RFIs: A properly prepared request for information shall include a detailed written statement that indicates the specific Drawings or Specification in need of clarification and the nature of the clarification requested.
			1. RFIs shall be sequentially numbered.
			2. Drawings shall be identified by drawing number and location on the drawing sheet.
			3. Specifications shall be identified by Section number, page and paragraph.
		3. Improper RFIs: RFIs that are not properly prepared.
			1. Improperly prepared RFIs will not be processed by the Contracting Officer, but will be returned unprocessed.
		4. Frivolous RFIs: RFIs that request information that is clearly shown on the Contract Documents.
			1. Frivolous RFIs may be returned unprocessed.
	3. CONTRACTOR’S REQUESTS FOR INFORMATION:
		1. When the Contractor is unable to determine from the Contract Documents, the material, process or system to be installed, the Contracting Officer shall be requested to make a clarification of the indeterminate item.
			1. Wherever possible after contract award, such clarification shall be requested at the next site visit by the Contracting Officer’s Representative (COR), with the response entered on the daily reports. When clarification at the COR’s site visit is not possible either because of the urgency of the need, or the complexity of the item, Contractor shall prepare and submit an RFI to the Contracting Officer.
		2. Contractor shall endeavor to minimize the number of RFIs. In the event that the process becomes unwieldy, in the opinion of the Contracting Officer because of the number and frequency of the RFIs submitted, the Contracting Officer may require the Contractor to abandon the process and submit future requests as either submittals, substitutions or requests for change.
		3. RFIs shall be submitted on the form provided by the Contracting Officer. Forms completely filled in, and if prepared by hand, shall be fully legible after photocopying or fax transmission. Each page of the attachments to RFIs shall bear the RFI number in the upper right corner.
		4. RFIs shall be originated by the Prime Contractor.
			1. RFIs from subcontractors or material suppliers shall be submitted through, reviewed by, and signed by the Prime Contractor prior to submitting to the Contracting Officer.
			2. The Contracting Officer will neither act on nor respond to RFIs received directly from subcontractors or suppliers.
		5. Contractor shall carefully study the Contract Documents to assure that the requested information is not available therein. RFIs which request information available in the Contract Documents will be deemed either Improper or Frivolous as defined above.
		6. In cases where RFIs are issued to request clarification of coordination issues, for example, pipe and duct routing, clearances, specific locations of work shown diagrammatically, and similar items when feasible, Contractor shall fully lay out a suggested solution using drawings or sketches drawn to scale, and submit with the RFI.
		7. RFIs shall not be used for the following purposes:
			1. To request approval of submittals.
			2. To request approval of substitutions.
			3. To request changes which entail additional cost or credit.
			4. To request different methods of performing work than those drawn and specified.
		8. In the event the Contractor believes that a clarification by the Contracting Officer results in additional cost or time, the Contractor shall not proceed with the work indicated by the RFI until a modification is prepared and approved. RFIs do not automatically justify a cost increase in the work or a change in the project schedule.
			1. Answered RFIs shall not be construed as approval to perform extra work.
		9. Contractor shall prepare and maintain a log of RFIs, and at any time requested by the Contracting Officer, Contractor shall furnish copies of the log showing outstanding RFIs. Contractor shall note unanswered RFIs in the log.
		10. Contractor shall allow up to 14 days review and response time for RFIs, however, the Contracting Officer will endeavor to respond in a timely fashion to RFIs.
		11. The Government reserves the right to issue a change order to expedite the work per FAR Clause 52.243-4, Changes.
	4. CONTRACTING OFFICER’S RESPONSE TO RFIs:
		1. Contracting Officer will respond to RFIs on one of the following forms:
			1. Proper RFIs:
				1. Change Order
				2. Request for Proposal
			2. Improper or Frivolous RFIs:
				1. Unprocessed RFIs will be returned with a stamp or notation: Not Reviewed.
			3. Answers to properly prepared RFIs may be made directly upon the RFI form with supplementary instructions as necessary.

SECTION 01 31 19

PROJECT MEETINGS

* 1. LOCATION: Project meetings will be conducted either on-site or with a conference call. The following meetings may be held:
	2. Pre-Construction Conference: After award of a contract, the Coast Guard will arrange a conference with the Contractor, and necessary Coast Guard personnel. The purpose of this conference is to orient the Contractor to Government procedures for wage rates, contractual and administrative matters, and to discuss specific issues regarding actual construction.
	3. Progress and Technical Review Meetings: These meetings generally take place at the project site. Either party may request a meeting to review the progress of the project and/or review or clarify the technical requirements of the specifications.

SECTION 01 32 16

CONSTRUCTION SCHEDULE, SCHEDULE OF VALUES,

AND PROGRESS SCHEDULE

* 1. **In accordance with the Notice to Proceed letter**, the Contractor shall submit the following:
		1. Construction Schedule-This schedule shall be prepared using a horizontal bar graph with time scale. It shall be in an industry accepted Project Management format and shall accurately display:
			1. All major categories of work to be performed within the required contract completion date broken out in sufficient detail to track progress throughout the life of the contract. Major work categories should include but are not limited to mobilization, carpentry, plumbing, mechanical, electrical, roofing, concrete, site work, and demobilization. In addition to construction activities, procurement times for critical items, submittal turnaround time, mobilization, final inspection, punchlist work, and demobilization shall be shown on the schedule.
			2. The duration of each work category.
			3. Any concurrent work categories.
		2. Schedule of Values-This schedule shall be prepared as a detailed cost breakdown of the contract price and be submitted with the Construction Schedule. This schedule shall include but not be limited to costs of materials, equipment, and labor for all major work categories shown on the Construction Schedule. The Contractor shall adhere to the following guidelines when developing the Schedule of Values.
			1. Format - The line items in the Schedule of Values **shall** be the same as that of the Construction Schedule.
			2. Bonds - Bonding costs will only be paid in a lump sum if they are broken out separately and included with the schedule of values. The Contractor shall provide evidence that he has furnished full payment to the surety.
			3. Materials - To request progress payments for materials delivered to the construction or fabrication site, the particular category of work associated with the materials must be broken down into separate material and labor costs.
	2. UPDATES: **Each month and /or with each progress payment request,** the Contractor **shall** submit the following:
		1. **Progress Schedule**-This schedule shall be an update of the Construction Schedule. It shall show the current schedule of all work.
			1. Modifications - If modifications are made to the contract, the work added shall be tracked separately from the original Construction Schedule and shall maintain its individuality on the Progress Schedule throughout the life of the contract. Progress Payment requests shall not lump modification costs into the original contract price.

SECTION 01 32 26

CONSTRUCTION DAILY REPORTS

1.0 GENERAL: **The Contractor shall complete a Daily Report for each and every day after mobilization. The Daily Report shall be electronic and e-mailed to the COR’s Inbox.** The importance of an accurate, fully detailed Daily Report, promptly delivered to the designated On-Site Representative cannot be overemphasized. The report shall provide an accurate cumulative summary of the history and performance of the work. The Daily Report shall document weather; work hours; work in-place; inspections and tests conducted, and their results; dimensional checks; equipment and material checks; data on workers by classification; the mobilization and demobilization of construction equipment; materials delivered to the site; and any other pertinent noteworthy event; e.g., personnel injury, site visit by Coast Guard personnel, etc.

2.0 RESPONSIBILITY: The Daily Reports play an important role in settling disputes and claims for both parties. For this reason the On-Site Representative and the Contractor's Superintendent, together, should review the report to ensure its completeness and accuracy. Each day's report shall be submitted to the On-Site Representative no later than 10:00 a.m. the following morning. The maximum allowable retainage will be enforced for late, sporadic or non-submission of Daily Reports. In the absence of an On-Site Representative the Contractor shall mail the Daily Reports directly to the Contracting Officer every Friday. Should the Daily Report indicate an accident, environmental issue, OSHA violation or any crisis the On-Site Representative deems important, the Report should be faxed immediately to the Contracting Officer at (216) 902-6278.

3.0 DESIGNATED ON-SITE REPRESENTATIVE RESPONSIBILITY: After a Notice to Proceed for site work has been issued the On-Site Representative shall complete a Daily Report for each day until the Contractor mobilizes. After the Contractor is at the site, the On-Site Representative shall ensure that the Contractor completes the Daily Report in accordance with Paragraphs 1 and 2 above. Any items of dispute or other notes the On-Site Representative feels appropriate shall be added to the Daily Report. The On-Site Representative is also responsible for informing the COR when the Contractor fails to submit daily reports.

SECTION 01 33 00

SUBMITTAL PROCEDURES

1.0 GENERAL: The Contractor shall submit to the Contracting Officer (4) copies of submittals required by this specification and/or itemized on the **"List of Submittals"** found at the end of this division.

* 1. REQUEST: A **"CONTRACT ITEM ACCEPTANCE REQUEST"** shall accompany all submittals. All items shall be individually listed and clearly identified, referencing the applicable Section and Paragraph. A copy of this form is located at the end of this division and may be reproduced as needed.
	2. Up to eight (8) items may be listed on an individual acceptance request. Number each Contract Item Acceptance Request consecutively *(Submittals # 1, 2, etc.)* and re-submittals with letters *(Submittal #1A is the first re-submittal of Submittal #1)*.
	3. Submittals shall be forwarded to the Contracting Officer. The Contractor **shall allow 14 calendar days**, excluding mailing time, for the review process in the Construction Schedule and all project planning. In instances where submittal review must be expedited, the Contractor may annotate the Contract Item Acceptance Request as "Urgent" and provide a FAX number for prompt return. The Coast Guard will make every effort to accelerate the review of each urgent submittal; however, the Contractor should not anticipate a reduced time schedule and shall plan project progress accordingly.
	4. DEVIATIONS
	5. Deviation from specification**:**
		1. The Contracting Officer will consider requests for deviations/substitutions only if submitted within fifteen (15) calendar days after award.
		2. Deviations may be considered when a product becomes unavailable through no fault of the Contractor.
		3. The Contractor shall document each request with complete data substantiating compliance of proposed deviation with the Contract documents*. Request for deviation* ***shall not*** *be submitted on a Request for Information (RFI) form.*
		4. A request constitutes a representation that the Contractor:
			1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
			2. Will provide the same warranty for deviation as for specified product.
			3. Will coordinate installation and make changes to other work which may be required for the work to be completed at no additional cost to the Government.
			4. Waives claims for additional costs or time extension which may subsequently become apparent.
			5. Will reimburse the Government for review or redesign services associated with re- approval by the Contracting Officer.
		5. If the deviation has a lesser value than the product originally specified, the Contractor shall provide a credit to the Government.
		6. Deviations will not be considered when they are indicated or implied on Shop Drawings or Product Data submittals, without a separate written request, or when acceptance will require revisions to the Contract documents.
	6. Deviation submittal procedures:
		1. The Contractor shall mark the “Deviation” block on the Contract Item Acceptance Request (CIAR) form and provide the information stated in Paragraph 3.1.
		2. The Contractor shall submit shop drawings, product data, and certified test results attesting to proposed product equivalence. Burden of proof is on the Contractor.
		3. The Contracting Officer will then review the “deviation” request and either accept or reject the deviation. The Contracting Officer’s acceptance of the deviation signifies that the Contractor has provided the information required in Paragraph 3.1. If a credit is due the government, the Contracting Officer will notify the Contract Specialist and the deviation will be processed utilizing the Change Request procedures for a modification to the contract/task order.
		4. The Contracting Officer will notify the Contractor of acceptance/rejection of the deviation via an accepted or rejected CIAR. The Contracting Officer will notify the Contractor, in writing, if a modification to the contract is required.
		5. If a request for deviation is received without the documentation stated above, the Contracting Officer will return the submittal to the Contractor for the required information.
	7. ACCEPTANCE: Submittals will be stamped "Accepted," "Accepted with Comments," or "Resubmit". Acceptance, Acceptance with comments or Resubmit for each item will be indicated on the Contract Item Acceptance Request form and one copy returned to the Contractor.
	8. **Prompt re-submittal of items is required.** The Contractor shall furnish a new Contract Item Acceptance Request numbered in accordance with the requirements of paragraph 2.1.
	9. DEFECTIVE WORK: Acceptance of Submittals **does not** restrict the Government's right to reject departures from contract requirements, use of damaged or improperly installed items/materials, or latent defects, nor does it prejudice the Government's rights of rejecting any work found defective at Final Inspection and Acceptance.
	10. Work started or completed prior to submittal acceptance is **solely** at Contractor's risk and may jeopardize contract performance.

SECTION 01 35 29

SAFETY PROGRAM

1.0 GENERAL: The Contractor is wholly responsible for work site safety. The Contractor shall implement a safety program that protects the lives and health of personnel in the construction area, prevents damage to property, and avoids work interruptions. The Contractor shall provide appropriate safety barricades, signs, signal lights, etc. (see Section 01 56 00, “Lights, Signs & Barricades”) as well as complying with the requirements of all applicable Federal, State and Local safety laws, rules and regulations.

2.0 COMPLIANCE: The Contractor is specifically required to comply with the requirements of the U. S. Army Corps of Engineers "Safety and Health Requirements Manual" (EM 385-1-1, *latest version available*) and the “Accident Prevention” clause (FAR 52.236-13). Once accepted, this safety plan shall become part of the contract requirements. ***Note: This review/acceptance does not in any way relinquish the Contractor from responsibility for work site safety nor the obligation to comply with the OSHA regulations found in 29 CFR 1910 & 1926 or any other State or Local safety law, rule or regulation applicable to the contract work.*** *The Coast Guard will cooperate fully with the Department of Labor (Occupational Safety and Health Administration) in their enforcement of OSHA regulations.*

3.0 SAFETY PLAN: The Contractor **shall submit a written safety plan.** At a minimum, this plan shall describe the Contractor's general safety program and identify specific safety provisions for hazards incidental to the contract work; e.g., elevated working surfaces, working over water, working from floating work platforms, overhead crane operations, etc.

SECTION 01 51 00

TEMPORARY UTILITIES

1.0 GENERAL: All temporary utility connections shall be compatible with existing materials and equipment to provide safe and efficient installation, operation and removal.

2.0 ELECTRICITY AND WATER: Electrical power and water are available on the site. The Contractor will be permitted to utilize these utilities in performing the work, provided that the existing systems are not overloaded. The Contractor is responsible for installing and removing all connections to existing systems and shall ensure work and materials are in accordance with local codes. The use of the electricity shall be limited to tools that can be operated on 60 Hertz, single phase, 20 ampere, 120 volt circuits.

3.0 TELEPHONE: Telephone services will not be available for use by the Contractor.

4.0 WATER HOOKUP: All connections to the water system shall be equipped with back flow protection. Temporary potable water pipes and hoses shall be sterilized before being placed in operation and every time the system is opened to the atmosphere for repair or relocation.

5.0 SANITARY FACILITIES: It shall be the Contractor's responsibility to furnish and maintain approved portable toilet facilities for all Contractor personnel. The On-Site Representative will designate the physical location for the facility and the Contractor shall maintain the toilet facility to the satisfaction of the Government. Contractor personnel are forbidden to use toilet facilities within existing buildings.

SECTION 01 51 13

EQUIPMENT/UTILITY LOCKOUT AND TAGOUT REQUIREMENTS

1.0 GENERAL: The Contractor shall comply with OSHA 29 CFR 1910.147, “The Control of Hazardous Energy” (Lockout/Tagout). The Contractor shall provide a Lockout/Tagout Plan to the Contracting Officer prior to starting any work affected by the energy in the equipment/utility system.

2.0 APPLICATION: The Contractor shall be responsible for locking out and tagging out of service, all equipment/utility systems involved in the work under this contract. After the Contracting Officer’s Representative has approved an outage, Government personnel and the Contractor shall independently secure the equipment/utility system and tag the respective system out of service. The Contractor shall provide their own locks and chains that are required to secure the equipment/utility systems; e.g., steam, water, air, and/or electricity.

SECTION 01 51 16

TEMPORARY FIRE PROTECTION

* 1. TEMPORARY FIRE PROTECTION: Install and maintain temporary fire-protection facilities to protect against predictable and controllable fire loss. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations".
	2. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher at each floor stairwell and one at each building construction opening for personnel egress.
	3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire- protection facilities, stairways and other access routes for fighting fires.
	4. Provide independent supervision of welding, flame cutting and other open flame work. Provide each fire supervisor with an appropriate fire extinguisher.
	5. Provide training for all personnel on-site in the proper operation of each type of fire extinguisher provided. Provide all personnel with the proper notification procedure to summon the local fire department or emergency medical service.
	6. There shall be NO SMOKING or unsupervised open flame permitted inside any structure, temporary or permanent; nor within 25 feet of combustible material or within 50 feet

of flammable liquids or compressed gasses.

SECTION 01 54 30

CONFINED ENTRY

1.0 COMPLIANCE: The Contractor shall comply with OSHA 29 CFR 1910.146, Permit- Required Confined Space. The Contractor shall provide a Confined Space Entry Plan to the Contracting Officer prior to entering, or starting any work, in a confined space. The Contractor shall provide all equipment and materials as required to comply with OSHA and complete the work under this contract.

SECTION 01 55 00

ACCESS ROADS AND PARKING

1.0 ACCESS: Access to the site is available from public roads. Any damage to these roads by the Contractor's vehicles shall be repaired without cost to the Government.

2.0 PARKING: Vehicular operations and parking shall comply with all applicable government orders and regulations. All driveways and entrances serving the Government shall be kept clear and available to emergency vehicles at all times.

3.0 VEHICLE AND VEHICLE OPERATION: All vehicles, owned by the Contractor or employees of the Contractor, and operators of these vehicles, shall meet all state regulations for safety, noise, loading and minimum liability insurance. All vehicle operators demonstrating reckless or careless operation in the opinion of the Government shall not be allowed to operate vehicles on government property for the duration of the contract.

4.0 VISITORS: No visiting vehicles will be permitted on government property unless the operator is employed by a subcontractor or supplier.

5.0 CONSTRUCTION OPERATIONS: Contractor shall ensure at least one vehicle lane and one pedestrian entrance is available for use throughout the entire construction project.

SECTION 01 55 29

STAGING AREAS AND ACCESS

1.0 LOCATION: The Contractor shall store materials and operate equipment within the confines of the staging area identified by the Government. Storage of materials outside of the staging area will not be permitted.

2.0 COORDINATION: Two weeks prior to construction, the Contractor shall contact the Project Manager LT Avery Weston, at (410) 636-4098, to verify the staging area.

3.0 ADJACENT AREAS: The Contractor shall ensure that all land and vegetation adjacent to the staging area and access drive remain undisturbed and undamaged; all damages shall be repaired at no cost to the Government.

SECTION 01 56 00

LIGHTS, SIGNS & BARRICADES

1.0 GENERAL: The Contractor shall provide and maintain all warning lights, sign, and barriers to ensure the safety of pedestrians or vehicles traveling near or through any hazardous area caused by the execution of the Contract work.

2.0 LIGHTING: All lighting requirements shall meet table 7-1 in the US Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1).

3.0 BARRICADES: Hard barricades or flexible barriers shall completely encompass all exterior work areas. Flexible barriers shall consist of 1/2 inch steel bars or 2" X 2" wood stakes driven 12 inches minimum into hard packed soil. Space stakes on a maximum 10 feet interval and with two rows of yellow or orange 1/4 inch diameter rope (wire and plastic tape are not acceptable) at 24 inches and 36 inches each above ground.

SECTION 01 57 13

EROSION AND SEDIMENT CONTROL

1. GENERAL: The Contractor shall plan and execute all earthwork to minimize the duration of exposure of unprotected soils. Temporary protection shall be provided on side and back slopes as soon as rough grading is completed or when sufficient soil is exposed to require protection to prevent erosion. All earthwork brought to final grade shall be finished immediately.
2. METHODS: The Contractor shall prevent erosion, control sedimentation, and prevent waterborne soil from entering surface waters, ditches, and storm drain inlets by use of any or all of the following methods.
	1. Mechanical Control: Divert runoff by constructing ditches or berms. Filter runoff using straw bale dikes, filter fabric dams or other methods.
	2. Sediment Basins: Trap sediment in temporary basins sized to accommodate the runoff of a local 25-year storm. Pump basins dry and remove accumulated sediment after each storm. Use a paved weir or vertical overflow pipe for overflow. Establish effluent quality monitoring programs as required by federal, state, and local regulations.

3.0 OTHER METHODS: Other erosion and sediment control methods may be used, as authorized by the Contracting Officer.

SECTION 01 57 20

ENVIRONMENTAL PROTECTION

1. GENERAL: Protect the environment & preserve natural resources during construction.
2. ENVIRONMENTAL PROTECTION PLAN: Develop an Environmental Protection Plan for the project. The Environmental Protection Plan shall address each of the following items and discuss measures that will be used to meet the requirements. Submit 2 copies of the Environmental Protection Plan to the Contracting Officer and the COR for approval prior to the start of any site work and should be submitted within 10 days after NTP.

2.1 Repair, restore, or replace scarred or damaged features upon completing the work. The Contractor shall obtain written approval from the CONTRACTING OFFICER for the repair or restoration method prior to performing work.

* 1. Protection: Protect elevation monuments, bench-marks, markers, historic buildings, and works of art.
	2. Temporary Construction: Remove traces of temporary construction such as haul roads, staging areas, office trailers, work areas, and stockpiles of materials.
	3. Water Resources: Perform work in a manner that minimizes adverse environmental impacts on water resources.
	4. Seeding: Grade, till, and seed all areas disturbed by construction. Include topsoil and nutriment during seeding.
	5. The Contractor shall notify the CONTRACTING OFFICER and the COR immediately upon discovery of contaminated soil or suspected contaminated soil and receive a copy of the submittal. All large amounts of contaminated soil shall be covered with heavy black 8-mil poly or stored in covered, lined, gasket roll-off containers. Small amounts of contaminated soil shall be stored in 55 gallon steel drums. Contaminated soil shall be placed in the roll-offs or drums immediately upon excavation. Roll-offs & drums shall be covered when not in use.
	6. Burn-off of ground cover and soil is not permitted.
	7. All borrowed soil & backfill shall be from off-site (off Coast Guard Property). Manage & control borrow areas to prevent sediment from entering surface waters. Storage of borrowed material on-site is permitted. Cover all soil with at least 8-mil black poly plastic covering. Provide hay bales or silt fence around soil storage.
	8. Earthwork brought to final grade shall be immediately finished. Finish with either hay bales, straw & seed, erosion control fabric and seed, sod, or similar erosion prevention materials. Plan & conduct earthwork to minimize the duration of exposure of unprotected soils.
	9. Divert runoff by constructing temporary ditches or berms, and then filter runoff using a filter cloth, silt fence and storm drain inlet protection.
		1. Sediment Basins: Trap sediment in temporary basins.
		2. Silt Fence Or Hay Bales: Install silt fences or hay bales around all unstable soil & around all nearby storm drains prior to work.
	10. Pick up waste, trash and construction debris resulting from work and place in Contractor supplied containers. Empty containers and remove waste from Coast Guard property to prevent overflow or windblown debris. Remove waste without spilling on contaminating streets, the site & other areas. Do not dispose of waste materials or in existing Coast Guard dumpsters, trash cans, or roll-off containers.
	11. Prevent hazardous materials & wastes from entering the ground, catch basins, drains, drainage areas & surface waters. Fuel and lubricate equipment in a manner that protects against spills and evaporation. Clean up all spills immediately. Surround temporary petroleum and liquid chemical storage tanks with a temporary berm of size and strength to contain the tank contents in the event of a leak or spill. Immediately notify the CONTRACTING OFFICER and the COR of hazardous material spills. The Contractor shall be responsible for all costs associated with cleanup of material spills both hazardous and non-hazardous.

SECTION 01 57 23

POLLUTION CONTROL

* 1. VOLATILE ORGANIC COMPOUND (VOC) REGULATIONS: Contractors are required to comply with local, state and federal VOC compliance laws and regulations in the foregoing order of precedence. In order to comply with the provisions of the Clean Air Act, each state must have a State Implementation Plan. Some contractors may be required to abide by the provisions of a Title V Permit. Some Contractors may be required by state or local law to operate under the terms of a Compliance Plan to reduce VOC Emissions.
	2. In accordance with the Notice to Proceed Letter, the Contractor will submit copies of any local, state or federal implementation plans, permits or compliance plans required/applicable to the use/application of VOCs at Contractor's facility or offsite work places.
	3. If no local, state or federal implementation plans, permits or compliance plans are required/applicable to the use/application of VOCs, then the Contractor shall submit to the designated Contracting Officer a letter, notarized under oath, that such documents are not required.

If the use of paint is required the Contractor shall submit to the Contracting Officer and in accordance with the Notice to Proceed Letter, certificates, specifications or manufacturing data verifying the VOC rating.

2.0 SPILL RESPONSE PLAN: The Contractor shall submit a Spill Response Plan covering all regulated materials brought to the site for execution of work and all wastes generated as a result of the work to the Contracting Officer. The plan shall include, at a minimum, the following: types and quantity of all substances covered under this plan; the reportable quantity (RQ) for each substance; the onsite storage location of each substance; the Contractor's spill response equipment, if applicable; procedures to be followed for responding to a spill, including initial responses to be taken; procedures to be followed in reporting a spill, including the names and telephone numbers for all federal, state, and local agencies/authorities to be notified; and the name, address, and telephone number (work, home, cell and pager) of all Contractor response and media relations personnel.

2.1 In the event of a spill or release, the Contractor shall be responsible for immediate implementation of the spill response plan and restoration of the site to pre-spill condition at no cost to the Government. The Contractor shall also immediately notify the Contracting Officer to coordinate further notifications.

SECTION 01 58 00

MARINE LIGHTS AND SIGNALS

1. GENERAL: The Contractor's Marine equipment shall display such lights and day signals as may be required under applicable Navigation Rules. The Contractor shall inquire at the nearest Coast Guard Marine Safety Office for specific information on these rules.

SECTION 01 65 00

RECOVERED MATERIALS NOTICE

1.0 GENERAL: It is the intent of CEU Cleveland to comply with the requirements of Section 6002 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA or the Act) as amended, 42 U.S.C. 6962 and Executive Order 12873 as they apply to the procurement of the materials designated in paragraph 2.

2.0 DESIGNATED RECOVERED MATERIALS: It is the purpose of this section to designate items that are or can be made with recovered materials. These designated items can be found at <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program#products>

3.0 CONTRACTOR RESPONSBILITY: The Contractor should provide recycled materials to the extent practical, provided the materials meet all other requirements of the applicable specification section.

SECTION 01 66 13

HAZARDOUS WASTE

1.0 GENERAL: The Contractor shall comply with all federal, state, and local environmental regulations dealing with the generation, management, storage, and disposal of solid, toxic, and hazardous wastes. The Contractor shall ensure that all wastes are properly containerized, labeled and placarded, managed, tested, stored, documented/manifested, transported and disposed of in accordance with all applicable regulations.

2.0 SUBMITTALS: The Contractor shall provide the Contracting Officer with signed and fully executed originals of all hazardous waste profiles, test results, hazardous waste manifests and/or other shipping papers, electric lamp disposal documents and all other required documentation. Maximum payment retention shall be withheld until this documentation is received.

SECTION 01 66 16

SAFETY DATA SHEETS AND MATERIAL HANDLING PROCEDURES

1.0 DATA SHEETS: Submit a Safety Data Sheet (SDS) for all materials containing hazardous substances required for contract execution. Information provided in SDS’s shall meet the requirements of 29 CFR 1910.1200. SDS’s require Contracting Officer review and acceptance prior to bringing these materials on site.

2.0 MATERIAL STORAGE: Limit the quantity of these materials stored on site to the amount needed for execution of work. Storage of excess materials will not be permitted. Assure that the storage of these materials comply with all applicable federal, state, and local laws and regulations and provide additional storage facilities (paint lockers, etc.) as required for the storage of such materials. Coordinate the physical location of storage areas with the On-site Representative prior to bringing these materials on site.

3.0 PROTECTIVE MEASURES: The Contractor shall take all protective measures outlined on the SDS’s and as required by federal, state and local regulations to protect all personnel in the vicinity of the work area from exposure to these materials. The Contractor shall include any required protective measures in the Safety Plan (See Section 01 35 29, “Safety Program”). The Contracting Officer's Representative shall review protective measures prior to allowing use of these materials.

4.0 DISPOSAL OF EXCESS MATERIAL: The Contractor shall dispose of all excess hazardous materials as required by the SDS and all applicable federal, state, and local laws and regulations.

SECTION 01 74 00

GENERAL CLEANUP & SITE RESTORATION OF WORK AREAS

1.0 GENERAL: The Contractor shall remove and properly dispose of all trash and debris incidental to the contract work from the limits of government property, as well as all adjacent affected areas. The Contracting Officer shall determine the extent and interval of these cleanups.

2.0 WORK AREA CLEANUP: At the end of each day the entire work area and all adjacent affected areas shall be thoroughly cleaned by removing all trash, debris, dust, etc. caused by the contract work. Any floor, wall or ceiling surfaces that may have been stained or soiled by the contract work shall be restored to pre-construction condition.

3.0 SITE RESTORATION: If at any time while performing the contract the Contractor causes damage or destruction to any portion of any Government facility or grounds; e.g., bulkheads, pavement, lawns, shrubbery, etc., it shall be the Contractor's responsibility to replace and/or restore the damage as approved by the Contracting Officer’s Representative at no additional cost to the Government.

4.0 POST CONSTRUCTION CLEANUP: Upon completion of the job, the Contractor shall clean up the job site, returning it to a state of cleanliness equal to or exceeding that in which it was found. The Contractor shall properly dispose of any trash, extra materials, dirt, debris, or other litter that remains. If the job site appearance is not to the satisfaction of the Contracting Officer’s Representative, final acceptance will not be approved.

SECTION 01 78 00

AS BUILT DRAWINGS

1.0 GENERAL: Maintain one full size set of contract drawings to record variations from the original design. **All deviations shall be neatly and clearly marked in RED** on these drawings to show work and/or materials actually provided. As Built drawings shall be **updated** as work progresses and kept at the work site for the duration of the contract. These drawings shall be available for Contracting Officer Representative review upon request.

2.0 DISCOVERED UTILITIES: Indicate the exact location of any **underground utility lines discovered in the course of the work** on the As-Built drawings.

3.0 PERMITTED VARIATIONS: As Built drawings shall reflect the actual construction and materials provided when alternative materials or work methods are allowed in the specifications and/or drawings or if the scope is altered by award of bid items, subsequent changes or modifications.

4.0 STANDARDS: Variations shown on As Built drawings shall be neat, clear and conform with standard drafting practices. Mark-ups shall include supplementary notes, legends, and details necessary to convey the exact representation of construction actually provided**. To comply with Computer Assisted Design (CAD) practices, only full size AS BUILT drawings are acceptable. As Built Drawings shall be in .dwg or AutoCAD compatible**

5.0 SUBMITTAL: Submit As Built drawings for Contracting Officer acceptance upon completion of the contract. **Final payment will not be until all required As-Built drawings are accepted.** Maximum retention shall be withheld for late or incomplete As Built drawings.

LIST OF SUBMITTALS

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Section Number** | **Paragraph** | **Specifications** | **Pre-Construction** | **Shop Drawings** | **Product Data & SDS** | **Samples and Colors** | **Design Data** | **Test Reports** | **Certifications** | **Manufacturer’s Instructions** | **Manufacture’s Field Reports** | **Specifications & Details** | **Applicator’s Quals** | **OP & Maintenance** | **Closeout Submittals** |
| 01 | 01 12 16 | 1. | Phasing and Laydown Plan | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 02 | 01 14 14 | 1. | Pre-Con Site Conditions Documentation | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 03 | 01 14 16 | 3.1 | Schedule | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 04 | 01 32 16 | 1.a | Construction Schedule | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 05 |  | 1.b | Schedule of Values | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 06 |  | 2.a | Progress Schedule | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 07 | 01 32 26 | 2.0 | Daily Reports | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 08 | 01 35 29 | 3. | Written Safety Plan | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 09 | 01 51 13 | 1. | Lockout/Tagout Plan | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 01 57 20 | 2 | Environmental Protection Plan | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 01 66 16 | 1. | Safety Data Sheets | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  | 2. | Material Storage | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | 01 78 00 | 5. | As-Built Drawings. Full sized red lined drawings & 1 set of electronic, AutoCAD files and 1 set of electronic, Adobe PDF files |  |  |  |  |  |  |  |  |  |  |  |  | X |
| 14 | 02 41 00 | 1.2.2 | Demolition Plan | X |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  | 1.8.5.5 | Pedestrian Turnstile Gates | X | X |  |  |  |  | X | X | X |  |  | X |  |
| 16 |  | 1.8.5.5 | Pedestrian Swing Gates | X | X |  |  |  |  | X | X | X |  |  | X |  |
| 17 |  | 2.1 | CAC Reader | X | X |  |  |  |  | X | X | X |  |  | X |  |
| 18 |  | 1.8.3.1 | Vehicle Vertical Rising Arm Barrier | X | X |  |  |  |  | X | X | X |  |  | X |  |
| 19 |  | 1.6.1.2 | Bicycle Lane Markings | X |  | X | X | X |  |  |  | X |  |  |  |  |
| 20 |  |  | Pedestrian Lane Markings | X |  | X | X | X |  |  |  | X |  |  |  |  |
| 21 |  32 11 70 | 1.2 | Porous Pavers & Base Stone |  |  | X | X |  |  | X | X |  | X |  |  |  |
| 21 |  32 12 93 | 1.2 | Manufactured Planters & plants |  |  | X | X | X |  | X |  |  | X |  |  |  |

CONTRACT ITEM ACCEPTANCE REQUEST

# Contract Number: DO/TO: HSCG83-

**Contract Specialist: Project Number:**

**Contractor Name:**

**URGENT YES NO (if yes) CONTRACTOR FAX #:**

**Submittal # Job Location:**

**NOTE**: **Contractor must mark Deviation column if submittal deviates from contract requirements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item No.** | **Spec Section and Paragraph** | **Description of Material Include Type, Model #, Manufacturer, Etc.** | **Deviation** | Status |
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STATUS ABBREVIATION GUIDE:

AC - Accepted

AC w/ CMT - Accepted with Comment R-Resubmit

# Comments:

|  |  |  |
| --- | --- | --- |
| Typed Name & Title | Signature | Date |

**NOTE:** Review and acceptance of submittals by the Government is intended to verify general conformance with the design intent as shown on the contract drawings and in the specifications. Acceptance by the Contracting Officer’s Representative does not relieve the Contractor of responsibility for any errors and/or omissions in the submittals, nor from the responsibility for complying with the requirements of the contract, except with respect to variations described and approved in accordance with FAR 52.243-4 CHANGE

DIVISION 2

SECTION 02 41 00

DEMOLITION

**05/10**

* 1. GENERAL: Work under this section covers the requirements for removal of existing pedestrian gates, mill roadway for overlay layer, (OPTION ITEM: 4) remove POLICE canopy over building 144.
	2. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)**

ASSE/SAFE A10.6 (2006) Safety Requirements for Demolition Operations

**U.S. ARMY CORPS OF ENGINEERS (USACE)**

EM 385-1-1 (2014) Safety and Health Requirements Manual

**U.S. FEDERAL AVIATION ADMINISTRATION (FAA)**

FAA AC 70/7460-1 (2015; Rev L) Obstruction Marking and Lighting

**U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION**

 (NARA) 40 CFR 61 National Emission Standards for Hazardous

 Air Pollutants

* 1. PROJECT DESCRIPTION
		1. Demolition/Deconstruction Plan: Prepare a Demolition Plan and submit proposed salvage, demolition, and removal procedures for approval before work is started. Include in the plan procedures for careful removal and disposition of materials, coordination with other work in progress, a detailed description of methods and equipment to be used for each operation and of the sequence of operations. Provide procedures for safe conduct of the work in accordance with EM 385-1-1. Plan shall be approved by Contracting Officer prior to work beginning.

Include in the plan a detailed description for protecting the adjacent structures from damage, and methods for cleanup of all debris. Plan shall include how debris will be removed from the site, controls for protecting existing structures and preventing debris from entering the areas outside the immediate area of demolition operations.

* + 1. General Requirements: Do not begin demolition or deconstruction until authorization is received from the Contracting Officer. The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Remove rubbish and debris from Government property daily, unless otherwise directed. Store materials that cannot be removed daily in areas specified by the Contracting Officer’s Representative. In the interest of occupational safety and health, perform the work in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections.
	1. ITEMS TO REMAIN IN PLACE: Take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government. Repair or replace damaged items as approved by the Contracting Officer. Coordinate the work of this section with all other work indicated.
		1. Existing Construction Limits and Protection: Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove snow, dust, dirt, and debris from work areas daily.
		2. Utility Service: Maintain existing utilities indicated to stay in service and protect against damage during demolition operations. Several utilities exist immediately adjacent to the demolition area. These utilities should be identified in the Demolition Plan. The Contractor must detail their contingencies for protecting these utilities and provisions for any necessary outages.
		3. Facilities: Protect electrical and mechanical services and utilities. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract.
	2. AVAILABILITY OF WORK AREAS: Areas in which the work is to be accomplished will be available in accordance with 01 14 00 CONTRACTOR WORK HOURS.
	3. QUALITY ASSURANCE: Submit timely notification of demolition projects to Federal, State, regional, and local authorities in accordance with 40 CFR 61, Subpart M. Notify the Regional Office of the United States Environmental Protection Agency (USEPA) and the Contracting Officer in writing 10 working days prior to the commencement of work in accordance with 40 CFR 61, Subpart M. Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," conform to the safety requirements contained in ASSE/SAFE A10.6. Comply with the Environmental Protection Agency requirements specified. Use of explosives will not be permitted.
		1. Dust, Turbidity and Debris Control: Prevent the spread of dust, turbidity and debris and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or pollution. Sweep pavements as often as necessary to control the spread of debris and dust.
	4. PROTECTION
		1. Traffic Control Signs
			1. Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Anchor barricades in a manner to prevent displacement by wind. Notify the Contracting Officer prior to beginning such work.
	5. EXECUTION
	6. DESCRIPTION OF WORK
		1. **Road**:
			1. Mill and overlay existing bituminous topping overlay (1.5”-2”) of road shown in drawings to be repaired, approximately 3200 square feet.
			2. Mill and overlay in a systematic manner preventing damage to surrounding structures and elements.
			3. Care shall be made to ensure no damage is incurred to existing sliding security gate/rail, manhole covers, and underground utilities.

**Pedestrian Gate:**

* + - 1. Remove existing pedestrian gates. Limit damage/disruption.
			2. To provide the necessary width for the new pedestrian gate turnstiles, selective demolition of the brick wall (2.5’) is required. Field verify dimensions to ensure new pedestrian turnstile gate fits the new dimensions.

**POLICE Canopy:**

* + - 1. Replace in kind with matching color and material.
			2. General Requirements: Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by the Contracting Officer. Do not interrupt existing utilities serving facilities occupied and used by the Government except when approved in writing and then only after temporary utility services have been approved and provided.
		1. Work shall be coordinated with COR to minimize disruptions to front gate access to CG Yard. Any security risks due to openings to security perimeter must be communicated and coordinated with COR and Base Security.
	1. DISPOSITION OF MATERIAL
		1. Title to Materials: Except for salvaged items specified in related Sections, and for materials scheduled for salvage, all materials and equipment removed and not reused or salvaged, shall become the property of the Contractor and shall be removed from Government property. Title to materials resulting from demolition and deconstruction, and materials and equipment to be removed, is vested in the Contractor upon approval by the Contracting Officer of the Contractor's demolition, deconstruction, and removal procedures, and authorization by the Contracting Officer to begin demolition and deconstruction. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Showing for sale or selling materials and equipment on site is prohibited.
		2. Reuse of Materials: Remove and store materials to be reused or relocated to prevent damage, and reinstall as the work progresses.
		3. Salvaged Materials: Salvaged materials to remain the property of the Government shall be removed in a manner to prevent damage, stored in a manner that protects the materials from damage, or as directed by the Contracting Officer’s Representative. Items damaged during removal or storage shall be repaired or replaced to match existing items. Removal of salvageable materials shall be accomplished by hand labor to the maximum extent possible. Care shall be taken to not damage items identified for salvage. Keep a complete recording of all salvaged materials including the condition of such materials before, and after, salvage operations.
	2. CLEANUP: Remove debris and rubbish from work area following each work day. Remove and transport the debris in a manner that prevents spillage on streets or adjacent areas. Apply local regulations regarding hauling and disposal.
	3. DISPOSAL OF REMOVED MATERIALS
		1. Regulation of Removed Materials: Dispose of debris, rubbish, scrap, and other nonsalvageable materials resulting from removal operations with all applicable federal, state and local regulations as contractually specified. Submit disposal receipts. Storage of removed materials on the project site is prohibited.
		2. Burning on Government Property: Burning of materials removed from demolished and deconstructed structures will not be permitted on Government property.
		3. Removal from Government Property: Transport waste materials removed from demolished and deconstructed structures, except waste soil, from Government property for legal disposal. Dispose of waste soil as directed.
	4. REUSE OF SALVAGED ITEMS: Recondition salvaged materials designated for reuse before installation. Replace items damaged during removal and salvage operations or restore them as necessary to usable condition.

-- End of Section –

DIVISION 10

SECTION 10 14 53

TRAFFIC SIGNAGE

# 02/15

* 1. GENERAL: The work under this section covers the installation of traffic signage as specified herein.
	2. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)**

AASHTO M 133 (2012; R 2016) Standard Specification for Preservatives and Pressure Treatment Processes for Timber

AASHTO M 168 (2007; R 2012) Standard Specification for Wood Products

AASHTO M 268 (2014) Standard Specification for Retroreflective Sheeting for Flat and Vertical Traffic Control Applications

AASHTO MASH (2016) Manual for Assessing Safety Hardware - Second Edition

**U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)**

FHWA SHS (2004; Supplement 2012) Standard Highway Signs

MUTCD (2015) Manual on Uniform Traffic Control Devices

* 1. TEMPORARY TRAFFIC SIGNS: During roadway work, signs in accordance with the drawings and MUTCD. Place vertically signs at right angles to the direction of, and facing, the traffic that they are intended to serve.
	2. PERMANENT TRAFFIC SIGNS: Install STOP sign, CROSSWALK sign, and erect all signs in accordance with the drawings and MUTCD. Place vertically signs at right angles to the direction of, and facing, the traffic that they are intended to serve. Each sign shall be LED, solar-powered that is capable of operating in flash or steady mode.
	3. REMOVAL AND RESTORATION: Remove all temporary signage upon completion of construction activities.

-- End of Section --

SECTION 32 16 19

CONCRETE CURBS AND SIDEWALKS

**05/18**

1 PART 1 GENERAL

1.1 Work includes providing cast-in-place concrete for concrete curbs and sidewalks.

1.1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN CONCRETE INSTITUTE INTERNATIONAL (ACI)

ACI/MCP-1 Manual of Concrete Practice Part 1

ACI/MCP-2 Manual of Concrete Practice Part 2

ACI/MCP-3 Manual of Concrete Practice Part 3

ACI/MCP-4 Manual of Concrete Practice Part 4

1.2 SUBMITTALS

Submit the following in accordance with Section [01 33 00](file:///D%3A%5C13816658%5CJOBS%5C13816658%5Cprntdata%5C01%2033%2000.doc) SUBMITTAL PROCEDURES:

1.2.1 Product Data

1.2.1.1 Aggregate materials; Portland Cement; Admixtures.

1.2.2 Design Data

1.2.2.1 Concrete mix design;

Thirty days minimum prior to concrete placement, submit a mix design.

1.3 DELIVERY, STORAGE, AND HANDLING

Do not deliver concrete until forms, reinforcement, embedded items, and chamfer strips are in place and ready for concrete placement.

1.4 Ready-Mix Concrete

Provide concrete that meets the requirements of ASTM C94/C94M.

Type and brand cement

Cement content in 94-pound bags per cubic yard of concrete

Maximum size of aggregate

Amount and brand name of admixtures

Total water content expressed by water/cement ratio

1.5 Concrete Materials:

1.5.1 Cement

ASTM C150/C150M, Type I or ASTM C595/C595M, Type cement. For exposed concrete, use one manufacturer for each type of cement, ground slag, fly ash, and pozzolan.

1.5.1.1 Portland Cement

Provide cement that conforms to ASTM C150/C150M, Type I. Use one brand and type of cement for formed concrete having exposed-to-view finished surfaces.

1.5.2 Water

Minimize the amount of water in the mix. The amount of water must not exceed 45 percent by weight of cementitious materials (cement plus pozzolans), and in general, improve workability by adjusting the grading rather than by adding water. Water must be fresh, clean, and potable; free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances deleterious to concrete.

1.5.3 Aggregates

ASTM C33/C33M, except as modified herein. Furnish aggregates for exposed concrete surfaces from one source. Provide aggregates that do not contain any substance which may be deleteriously reactive with the alkalis in the cement.

Aggregates must not possess properties or constituents that are known to have specific unfavorable effects in concrete when tested in accordance with ASTM C295/C295M.

1.5.4 Slump

Use concrete with a slump of 3 inches plus or minus 1 inch for hand placed concrete or 1 inch plus or minus 1/2 inch for slipformed concrete as determined in accordance with ASTM C143/C143M.

1.5.4.1 Air Content

Use concrete mixtures that have an air content by volume of concrete of 5 to 7 percent, based on measurements made immediately after discharge from the mixer.

1.5.4.2 Concrete Curing Materials

Impervious Sheet Materials - Use impervious sheet materials conforming to ASTM C171, type optional, except that polyethylene film, if used, must be white opaque.

Burlap - Use burlap conforming to AASHTO M 182.

White Pigmented Membrane-Forming Curing Compound - Use white pigmented membrane-forming curing compound conforming to ASTM C309, Type 2.

1.5.4.2 Concrete Protection Materials

Use concrete protection materials consisting of a linseed oil mixture of equal parts, by volume, of linseed oil and either mineral spirits, naphtha, or turpentine. At the option of the Contractor, commercially prepared linseed oil mixtures, formulated specifically for application to concrete to provide protection against the action of deicing chemicals.

PART 2 SUBMITTALS

BLANK

PART 3 EXECUTION

3.1 SIDEWALK

* + 1. As necessary, install sidewalk with a width of 48”. Excavate 10” in depth for sidewalk placement. Install stakes and strings to ensure straight sides and uniform excavation.

3.1.2 Pour 5” layer of compactible gravel as subbase. Tamp the subbase until it compacts to an even 4” thick layer.

3.1.3 Build and install 2 x 4 forms for sidewalk. Ensure forms are level.

3.1.4 Prior to placing concrete, dampen the gravel subbase. Ensure gravel is saturated but do not leave standing water.

3.1.5 Crown the sidewalk so it is ¼” higher at the center than at the edge.

3.1.6 Sidewalk shall have curb ramp with a slope not to exceed 2% and transition to curb elevation.

3.2 TRANSPORTATION

Transport concrete from the mixer to the forms as rapidly as practicable. Prevent segregation or loss of ingredients. Clean transporting equipment thoroughly before each batch. Do not use aluminum pipe or chutes. Remove concrete which has segregated in transporting and dispose of as directed.

3.3 EXAMINATION

The contractor shall conduct the necessary examination.

Do not begin installation until substrates have been properly constructed; verify that substrates are plumb and true.

Check field dimensions before beginning installation. If dimensions vary too much from design dimensions for proper installation, the contractor shall make the necessary corrections.

3.4 PREPARATION

Determine quantity of concrete needed and minimize the production of excess concrete. Designate locations or uses for potential excess concrete before the concrete is poured

General

Surfaces against which concrete is to be placed must be free of debris, loose material, standing water, snow, ice, and other deleterious substances before start of concrete placing.

3.4.1 General Placing Requirements

Deposit concrete continuously or in layers of such thickness that no concrete is placed on concrete which has hardened sufficiently to cause formation of seams or planes of weakness within the section. If a section cannot be placed continuously, provide construction joints as specified. Perform concrete placing at such a rate that concrete which is being integrated with fresh concrete is still plastic. Deposit concrete as nearly as practical in its final position to avoid segregation due to rehandling or flowing. Do not subject concrete to procedures which cause segregation.

Concrete to receive other construction must be screeded to proper level to avoid excessive skimming or grouting.

Do not use concrete which becomes nonplastic and unworkable or does not meet quality control limits as specified or has been contaminated by foreign materials. Use of retempered concrete is permitted. Remove rejected concrete from the site.

3.4.2 Vibration

ACI/MCP-2 and ASTM A934/A934M. Furnish a spare, working, vibrator on the job site whenever concrete is placed. Consolidate concrete slabs greater than 4 inches in depth with high frequency mechanical vibrating equipment supplemented by hand spading and tamping. Consolidate concrete slabs 4 inches or less in depth by wood tampers, spading, and settling with a heavy leveling straightedge. Operate internal vibrators with vibratory element submerged in the concrete, with a minimum frequency of not less than 6000 impulses per minute when submerged. Do not use vibrators to transport the concrete in the forms. Penetrate the previously placed lift with the vibrator when more than one lift is required. Use external vibrators on the exterior surface of the forms when internal vibrators do not provide adequate consolidation of the concrete.

3.5 CURING AND PROTECTION

3.5.1 General

Protect freshly placed concrete from premature drying and cold or hot temperature and maintain without drying at a relatively constant temperature for the period of time necessary for hydration of cement and proper hardening of concrete.

Start initial curing as soon as free water has disappeared from surface of concrete after placing and finishing. Keep concrete moist for minimum 72 hours.

Final curing must immediately follow initial curing and before concrete has dried. Continue final curing until cumulative number of hours or fraction thereof (not necessarily consecutive) during which temperature of air in contact with the concrete is above 50 degrees F has totaled 168 hours. Alternatively, if tests are made of cylinders kept adjacent to the structure and cured by the same methods, final curing may be terminated when the average compressive strength has reached 70 percent of the 28-day design compressive strength. Prevent rapid drying at end of final curing period.

When the temperature of atmosphere is 80 degrees F and above or during other climatic conditions which cause too rapid drying of concrete, make arrangements before start of concrete placing for installation of wind breaks, of shading, and for fog spraying, wet sprinkling, or moisture-retaining covering of light color as required to protect concrete during curing period.

3.5.2 Hot Weather Concreting:

The temperature of the concrete as placed must not exceed 85 degrees F except where an approved retarder is used. Cool the mixing water and aggregates as necessary to maintain a satisfactory placing temperature. The placing temperature must not exceed 95 degrees F at any time.

3.5.3 Cold Weather Concreting:

Do not place concrete when the air temperature reaches 40 degrees F and is falling, or is already below that point. Placement may begin when the air temperature reaches 35 degrees F and is rising, or is already above 40 degrees F. Make provisions to protect the concrete from freezing during the specified curing period. If necessary to place concrete when the temperature of the air, aggregates, or water is below 35 degrees F, placement and protection must be approved in writing. Approval will be contingent upon full conformance with the following provisions. Prepare and protect the underlying material so that it is entirely free of frost when the concrete is deposited. Heat as necessary to result in the temperature of the in-place concrete being between 50 and 85 degrees F. Methods and equipment for heating must be approved. Use only aggregates that are free of ice, snow, and frozen lumps before entering the mixer. Provide covering or other means as needed to maintain the concrete at a temperature of at least 50 degrees F for not less than 72 hours after placing, and at a temperature above freezing for the remainder of the curing period.

3.5.4 Curing Protection

During curing period, protect concrete from damaging mechanical disturbances, particularly load stresses, heavy shock, and excessive vibration and from damage caused by rain or running water.

-- End of Section –

SECTION 32 12 16

# HOT-MIX ASPHALT (HMA) FOR ROADS

# 08/19

PART 1 GENERAL

1.1 Work includes the paving of asphalt for roads and bicycle paths as indicated in C-01. All pavement materials shall meet Maryland State Highway Administration (SHA) Standard Specifications for Construction and Materials, Latest Edition.

1.1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)**

AASHTO M 156 (2013; R 2017) Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures

AASHTO M 320 (2017) Standard Specification for Performance-Graded Asphalt Binder

AASHTO T 304 (2011; R 2015) Standard Method of Test for Uncompacted Void Content of Fine Aggregate

**ASPHALT INSTITUTE (AI)**

AI MS-2 (2015) Asphalt Mix Design Methods

AI MS-22 (2001; 2nd Ed) Construction of Hot-Mix Asphalt Pavements

AI SP-2 (2001; 3rd Ed) Superpave Mix Design

**ASTM INTERNATIONAL (ASTM)**

ASTM C29/C29M (2017a) Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate

ASTM C88 (2018) Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate

ASTM C131/C131M (2014) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

ASTM C136/C136M (2014) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates

ASTM D75/D75M (2014) Standard Practice for Sampling Aggregates

ASTM D140/D140M (2016) Standard Practice for Sampling Asphalt Materials

ASTM D946/D946M (2015) Penetration-Graded Asphalt Cement for Use in Pavement Construction

ASTM D977 (2017) Standard Specification for Emulsified Asphalt

ASTM D1139/D1139M (2015) Aggregate for Single or Multiple Bituminous Surface Treatments

ASTM D1250 (2008) Standard Guide for Use of the Petroleum Measurement Tables

ASTM D2028/D2028M (2015) Cutback Asphalt (Rapid-Curing Type)

ASTM D2397/D2397M (2017) Standard Specification for Cationic Emulsified Asphalt

ASTM D2995 (1999; R 2009) Determining Application Rate of Bituminous Distributors

ASTM D3625/D3625M (2012) Standard Practice for Effect of Water on Bituminous-Coated Aggregate Using Boiling Water

ASTM D6373 (2016) Standard Specification for Performance Graded Asphalt Binder

PART 2 SUBMITTALS

* 1. Submit the design mix criteria in accordance with Maryland State Highway Administration.
	2. The asphalt mix shall be composed of a mixture of well-graded aggregate, mineral filler if required, and asphalt material. The aggregate fractions shall be sized, handled in separate size groups, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula (JMF). Submit proposed JMF; do not produce hot-mix asphalt for payment until a JMF has been approved. The hot-mix asphalt shall be designed in accordance with Marshall (MS-02), Superpave (SP-2), or Hveem (MS-02) procedures.

PART 3 EXECUTION

* 1. Mill and overlay the road identified in drawing C-01. The Bituminous Asphalt Surface Course shall be a min. 2”.
	2. Immediately before placing the hot mix asphalt, clean the underlying course of dust and debris. Apply a tack coat in accordance with the code and manufacturer specifications.
	3. Transport the hot-mix asphalt from the mixing plant to the site in clean, tight vehicles.
	4. Place and compact the mix at a temperature suitable for obtaining density, and surface smoothness. Upon arrival, place the mixture to the full width by an asphalt paver; it shall be struck off in a uniform layer of such depth that, when the work is completed, it will have the required thickness and conform to the grade and contour indicated. Regulate the speed of the paver to eliminate pulling and tearing of the asphalt mat. Unless otherwise permitted, placement of the mixture shall begin along the centerline of a crowned section or on the high side of areas with a one-way slope.
	5. Final grade shall crown the centerline in accordance with general industry standards and best practices. The final grade shall be smooth. The finished surfaces of the pavements shall have no abrupt change of 1/4 inch or more, and all pavements shall be within the tolerances of 1/4 inch in both the longitudinal and transverse directions, when tested with an approved 12 feet straightedge.

-- End of Section --

DIVISION 32

SECTION 32 17 23

PAVEMENT MARKINGS

**08/16**

* 1. GENERAL: Work under this section covers the requirements for roadway marking for bicycle, vehicles, and pedestrian crosswalks.
	2. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)**

AASHTO M 249 (2012; R2016) Standard Specification for White and Yellow Reflective Thermoplastic Striping Material (Solid Form)

**U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)**

MUTCD (2015) Manual on Uniform Traffic Control Devices

**ASTM INTERNATIONAL (ASTM)**

ASTM D6628 (2003; R 2015) Standard Specification for Color of Pavement Marking Materials

ASTM D7234 (2012) Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Testers

* 1. SUBMITTALS: Contracting Officer approval is required for all submittals. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:
		1. Product Data
		2. Surface Preparation Equipment List;
		3. Application Equipment List;
		4. Exterior Surface Preparation;
		5. Safety Data Sheets;
	2. Environmental Requirements:

Submit certificate stating that the proposed pavement marking paint meets the Volatile Organic Compound, (VOC) regulations of the local Air Pollution Control District having jurisdiction over the geographical area in which the project is located. Submit Safety Data Sheets for each

product.

* 1. DELIVERY AND STORAGE

Deliver paint materials, thermoplastic compound materials, and reflective media in original sealed containers that plainly show the designated name, specification number, batch number, color, date of manufacture, manufacturer's directions, and name of manufacturer.

Volatile Organic Content (VOC) of pavement markings used must conform to state and local regulations. The EPA's national volatile organic compound emission standards defines pavement markings as either "Traffic Marking Coating" or "Zone Marking Coating". VOC content of traffic marking coatings may not exceed 150 grams per liter. VOC content of zone marking coatings many not exceed 450 grams per liter.

* 1. EXECUTION

Apply pavement markings to clean, dry surfaces, and unless otherwise approved, only when the air and pavement surface temperature is at least 5 degrees F above the dew point and the air and pavement temperatures are within the limits recommended by the pavement marking manufacturer. Allow pavement surfaces to dry after water has been used for cleaning or rainfall has occurred prior to striping or marking. Test the pavement surface for moisture before beginning work each day and after cleaning. Do not commence marking until the pavement is sufficiently dry and the pavement condition has been approved by the Contracting Officer.

* 1. Traffic Controls

Place warning signs conforming to MUTCD near the beginning of the worksite and well ahead of the worksite for alerting approaching traffic from both directions. Place small markers along newly painted lines or freshly placed raised markers to control traffic and prevent damage to newly painted surfaces or displacement of raised pavement markers. Mark painting equipment with large warning signs indicating slow-moving painting equipment in operation.

When traffic must be rerouted or controlled to accomplish the work, provide necessary warning signs, flag persons, and related equipment for the safe passage of vehicles.

* 1. Lighting

When night operations are necessary, provide all necessary lighting and equipment. The Government reserves the right to accept or reject night work on the day following night activities by the Contractor.

* 1. Paint Application Equipment

Provide hand-operated push-type applicator machine of a type commonly used for application of water based paint or two-component, chemically curing paint, thermoplastic, or preformed tape, to pavement surfaces for small marking projects, such as legends and cross-walks, automotive parking areas, or surface painted signs. Provide applicator machine equipped with the necessary tanks and spraying nozzles capable of applying paint uniformly at coverage specified. Hand operated spray guns may be used in areas where push-type machines cannot be used.

* 1. Road Marking

Provide equipment used for marking roads capable of placing the prescribed number of lines at a single pass as solid lines, intermittent lines in the colors of paint as specified by MUTCD.

Thoroughly clean surfaces to be marked before application of the paint. Remove dust, dirt, and other granular surface deposits by sweeping, blowing with compressed.

* 1. Early Painting of Asphalt Pavements

For asphalt pavement systems requiring painting application at less than 30 days, apply the paint and beads at half the normal application rate, followed by a second application at the normal rate after 30 days.

* 1. Paint

Apply paint with approved equipment at rate of coverage specified herein. Provide guidelines and templates as necessary to control paint application. Take special precautions in marking numbers, letters, and symbols. Manually paint numbers, letters, and symbols. Sharply outline all edges of markings. The maximum drying time requirements of the paint specifications will be strictly enforced, to prevent undue softening of bitumen, and pickup, displacement, or discoloration by tires of traffic.

* 1. Cleanup and Waste Disposal

Keep the worksite clean and free of debris and waste from the removal and application operations daily. Dispose of debris at approved sites.

-- End of Section --

SECTION 32 31 26

PEDESTRIAN GATE

**02/20**

GENERAL:

* + - 1. For the (QTY: 2) pedestrian gates, all arm and barrier tubing must be 1¾ in diameter (14-gauge), have an exterior height of 7 ft -7 in. and a walk-through height of 7 ft. Turnstiles must rotate in a counter-clockwise direction and must be at a minimum 5 ft in diameter. Turnstile gate inbound access control systems must be HSPD-12 / FIPS-201 compliant and must be evaluated and approved by the COR, LT Avery Weston prior to ordering and installing.
			2. Exterior mounted card readers shall be HID iClass or approved equivalent that are compatible with HSPD-12 compliant government issued identification cards for the facility, or approved equivalent with integral keypad. They shall be mounted to the latch or active-leaf side of the controlled door. The card reader shall be rated for the environment. Card readers shall be mounted at a height of 48 inches above finished floor (AFF) to the active mechanism. Shall be GSA Approved product list for identity management. <https://www.idmanagement.gov/approved-products-list-pacs-products/>
	1. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**ASTM INTERNATIONAL (ASTM)**

ASTM F900 (2011; R 2017) Standard Specification for Industrial and Commercial Swing Gates

* 1. SUBMITTALS: Contracting Officer approval is required for all submittals. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES: **Pedestrian Turnstile Gate model(s) and specifications, CAC reader(s) model(s) and specifications.**
	2. QUALITY CONTROL
	3. Pedestrian Turnstile Gate must meet the minimum specifications:
		1. Size: 84”W x 91” H (including Canopy)



84”

91”

38”

84”

84”

* + 1. Stainless Steel
		2. Bidirectional Key Override Set for Manual 2-Way Units – Allows the turnstile to be locked independently in each direction with a turn of a key
		3. Card Reader Mounting Plate/Enclosure (1 per direction) – For mounting card readers
		4. Full Canopy (Stainless only with Box Tubing Frame) – Covers top of entire unit
		5. Lockout Bar (out of service lock) – Prevents rotor from turning
		6. Daylight Visible Indicator Lights – A tri-color (R/G/Y) indicator light.
		7. Battery Back-Up – For continued operation during power outage
	1. Pedestrian Swing Gate must meet the minimum specifications:
		1. Size: 84”W x 91” H (including Canopy)
		2. Card Reader Mounting Plate/Enclosure (1 per direction) – For mounting card readers
		3. Full Canopy (Stainless only with Box Tubing Frame) – Covers top of entire unit
		4. Lockout Bar (out of service lock) – Prevents rotor from turning
		5. Daylight Visible Indicator Lights – A tri-color (R/G/Y) indicator light.
		6. Battery Back-Up – For continued operation during power outage
		7. Push button to exit.
		8. Automatic gate closers must be installed to ensure the gate closes and locks after personnel transit and to prevent the gate from slamming shut.
		9. Locks must be located on the ingress side of personnel access gates. Hand-operated latches must be installed on the egress side for ease of opening without the need of a lock combination or key. Latches must be equipped with sheet metal or expended steel mesh to prevent personnel from accessing the egress latch from the exterior of the gate.



* 1. DELIVERY, STORAGE, AND HANDLING: Deliver and store in accordance with the manufacturer's written instructions.

2.0 WARRANTY: Provide a Manufactures' warranty that the coating system is of good quality, free from defects and conforms to specifications herein. Warranty must be good for one year after final acceptance of work.

* 1. EXECUTION
	2. INSTALLATION: Install pedestrian turnstile gate and CAC reader in accordance with manufacturer’s specifications.
	3. FINAL INSPECTION: Complete a final inspection of the pedestrian turnstile gate and CAC reader after installation. The final inspection must ensure the pedestrian turnstile gate and CAC reader conforms to specifications, and is free from defects.

-- End of Section

SECTION 32 11 70

POROUS PAVERS

* 1. GENERAL: Work under this section covers the requirements for the bicycle parking area.
	2. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

MDE (2000) Stormwater Design Manual Volumes I & II

**INTERLOCKING CONCRETE PAVEMETN INSTITUTE**

ICPI (2015) Technical Specification and installation guidelines.

**ASTM INTERNATIONAL (ASTM)**

ASTM D1557 (2015) Standard Test Method for Laboratory Compaction Characteristics of soil using modified effort.

ASTM D2940 (2015) Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports.

ASTM C926 (2018) Standard Specification for solid interlocking concrete paving units.

* 1. SUBMITTALS: Contracting Officer approval is required for all submittals. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:
		1. Product Data for pavers and backfill material
		2. Compaction and installation work plan.
		3. Photo documentation on pit demolition and total backfill depth.
		4. Concrete recycling receipts.
	2. ENVIRONEMENTAL REQUIREMENTS:

Submit photo documentation of demolition and backfill activities prior to installation of pavers.

* 1. DELIVERY AND STORAGE:

Store and protect backfill material in a manner that will allow 98% compaction per ASTM D 1557.

2.0 PRODUCTS:

Provide interlocking porous paver system to replace 380 square foot track scale area. Provide stone aggregate and appropriate backfill to meet the manufactures recommendations, ICPI installation guidelines, and MDE stormwater design manual.

* 1. PAVERS: Shall be concrete interlocking paving units that meet the quality and performance standard of ATSM C926. Product data and full size color sample shall be submitted to the COR for approval prior to procurement. Pavers shall be of the porous type similar in nature to the Nicolock Eco-Ridge. The pavers shall be a minimum of 3 1/8 in thick.
	2. BACKFILL:

Clean No. 2 stone subbase shall be used for the majority of the pit backfill. Clean No. 57 stone shall be used for the 4-inch open-graded base. No. 8 aggregate shall be used for the 2 in bedding layer and joint fill material.

1. EXECUTION:

All materials shall be installed in compliance with ICPI technical specifications and installation guidelines.

* 1. DEMOLITION:

Demolish truck scale and all associated equipment in accordance with section 02 41 00. Additionally, demolish scale pit floor to allow for drainage from porous paver system. The retaining walls that create the pit walls will remain.

* 1. INSTALLATION:

A.   General

1.  The entire pit is to be backfilled with graded aggregate and compacted to 98% compaction. Any excess thickness of soil applied over the excavated soil subgrade to trap sediment from adjacent construction activities shall be removed before application of the geotextile and subbase materials.

2.   Keep area where pavement is to be constructed free from sediment during entire job. geotextiles, base and bedding materials contaminated with sediment shall be removed and replaced with clean materials.

3.   Do not damage drainpipes, overflow pipes, observation wells, or any inlets and other    drainage appurtenances during installation. Report any damage immediately to the COR.

B.   Geotextiles

1.   Place on bottom of soil subgrade.

2.   Overlap a minimum of 12 inches

C.   Open-graded subbase and base

1.   Moisten, spread and compact the No. 2 subbase in 4 to 6 inch lifts.

2.   For each lift, make at least two passes in each direction until there is no visible movement of the No. 2 stone. Do not crush aggregate with the compactor.

3.   The surface tolerance of the compacted No. 2 subbase shall be ±2 1/2 in. over a 10 ft straightedge.

4.   Moisten, spread and compact the No. 57 base layer in one 4 in. (100 mm) thick lift.On this layer, make at least two passes in the vibratory mode then at least two in the static mode with a minimum 10 t (8 T) vibratory roller until there is no visible movement of the No. 57 stone. Do not crush aggregate with the roller. Note: Compaction of areas or sites that cannot accommodate a roller vibratory compactor may use a minimum 13,500 lbf vibratory plate compactor with a compaction indicator. At least two passes should be made over each lift of the subbase and base aggregates

 D.  Bedding layer

1. Moisten, spread and screed the No. 8 stone bedding material. Fill voids left by removed screed rails with No. 8 stone.
2. The surface tolerance of the screeded No. 8 bedding layer shall be ±3/8 in over a 10 ft straightedge.
3. Do not subject screeded bedding material to any pedestrian or vehicular traffic before paving unit installation begins.

 E.  Permeable interlocking concrete pavers and joint/opening fill material

1. Lay the paving units in the pattern(s) and joint widths approved by the COR. Maintain straight pattern lines.

2. Fill gaps at the edges of the paved area with cut units. Cut pavers subject to tire traffic shall be no smaller than 1/3 of a whole unit.

3. Cut pavers and place along the edges with a [double-bladed splitter or] masonry saw.

4. Fill the openings and joints with [No. 8] stone. *Note: Some paver joint widths may be narrow and not accept most of the No. 8 stone. Use joint material that will fill joints such as washed ASTM No. 89 or No. 9 stone.*

5. Remove excess aggregate on the surface by sweeping pavers clean.

6. Compact and seat the pavers into the bedding material using a low-amplitude, 75-90 Hz plate compactor capable of at least 5,000 lbf (22 kN). This will require at least two passes with the plate compactor.

7. Apply additional aggregate to the openings and joints if needed, filling them completely. Remove excess aggregate by sweeping then compact the pavers. This will require at least two passes with the plate compactor.

8.  The final surface tolerance of compacted pavers shall not deviate more than ±3/8 (10 mm) under a 10 ft (3 m) long straightedge.

9. The surface elevation of pavers shall be 1/8 to 1/4 in. (3 to 6 mm) above adjacent drainage inlets, concrete collars or channels.

* 1. FIELD QUALITY CONTROL:

A.   After sweeping the surface clean, check final elevations for conformance to the drawings.

B.   Lippage: No greater than 1/8 in. (3 mm) difference in height between adjacent pavers. *Note: The surface of the pavers may be 1/8 to 1/4 in. (3 to 6 mm) above the final elevations after compaction. This helps compensate for possible minor settling normal to pavements.*

C.   The surface elevation of pavers shall be 1/8 to 1/4 in. (3 to 6 mm) above adjacent drainage inlets, concrete collars or channels.

D.   Bond lines for paver courses: ±½ in. (±15 mm) over a 50 ft (15 m) string line.

E.   Verify the surface infiltration at a minimum of 100 in./hour using test method C 1781.

* 1. CLEAN UP AND WASTE DISPOSAL: Keep the worksite clean and free of debris and waste from the removal and application operations daily. Dispose of debris at approved sites. All concrete shall be recycled.

-- End of Section –

SECTION 32 12 93

MANUFACTURED PLANTERS

* 1. GENERAL: Work under this section covers the requirements for the screening of bicycle parking area and the pedestrian separation area.
	2. REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**AMERICAN ASSOCIATION OF NURSERYMAN**

ASA Z 60.1 2014 American Standard for Nursery Stock

* 1. SUBMITTALS: Contracting Officer approval is required for all submittals. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:
		1. Product Data
		2. Proposed Planting Plan

2.0 PRODUCTS: The contractor shall provide planter boxes, soil, plants, and mulch to provide a continuous visual screening of 100 linear feet along the perimeter of the bike parking area. Additionally the contractor shall provide four additional planters for pedestrian security outside the gate entrance. The bike areas planters and planter shall be no less than 4 feet in height.

2.1 PLANTS:

A. Plants shall be nursery-grown unless otherwise specifically permitted in each instance. American Association of Nurserymen Standard ASA Z 60.1 shall apply.

B. Plant material shall conform to state and federal laws relating to inspection for diseases and insect infestation, and shall conform to the American Standard for Nursery Stock.

C. Plants shall have normal, well-developed branches and be densely foliated when in leaf.

Plants shall be vigorous and free from defects, disease, insect pests, eggs or larvae, sunscaled, injuries and abrasions of the bark. Plants shall have well-developed root systems.

D. Plants shall be container grown or burlap balled. Freshly dug plants, heeled in plants or plants from cold storage shall not be accepted. Trees that have their leader cut, or are so damaged that cutting is necessary, shall not be accepted.

E. Plants shall be evergreen trees our shrubs intended for annual pruning and shaping to maintain and neat manicure appearance

F. The planting shall be placed to provide a continuous screen effect and shall be a minimum of 2’ in height. Measurements of trees and shrubs shall be taken when their branches are in normal position. Height and spread dimensions specified refer to the main body of the plant, not from branch or root tip to tip.

2.2 PLANTERS:

1. The planters shall be constructed of concrete or fiberglass construction and have a clean finished appearance. The planters shall be a minimum of 24 inches in height and shall be constructed in a manner that allows side by side placement to give and continuous screening effects. The proposed product shall be submitted to the COR for approval prior to procuring.
2. The planter shall be of sufficient size to allow healthy grown for the chosen plant species and size.
3. Planting soil shall be composed of a mixture of one part topsail and one part peat or manure.
4. EXECUTION: The plants shall be selected using the American Nursery Stock Standards to best meet the product criteria set forth in section 2.0 and 2.1 and submitted for approval by the COR. The planters shall be installed, filled, and planted in accordance with the manufacturer’s recommendations and American Nursery Stock Standards.
	1. CLEANUP AND WASTE DISPOSAL:

Keep the worksite clean and free of debris and waste from the removal and application operations daily. Dispose of debris at approved sites.

-- End of Section --