

OCTOBER 7, 2020

PUTNAM REPAIR FACILITY AND MAINTENANCE FACILITY

FEDERAL AID PROJECT NO. N/A
STATE PROJECT NO. 0115-0121
TOWN OF PUTNAM

ADDENDUM NO.1

This Addendum addresses the following questions and answers contained on the “CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS”:

Question and Answer Nos. 9, 11, 14, and 28.

SPECIAL PROVISIONS

REVISED SPECIAL PROVISIONS

The following Special Provisions are hereby deleted in their entirety and replaced with the attached like-named Special Provisions:

- SECTION 1.20 – GENERAL CLAUSES FOR FACILITIES CONSTRUCTION
- SECTION 302000 – GENERAL SITE WORK

CONTRACT ITEM

REVISED CONTRACT ITEM

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ORIGINAL QUANTITY</u>	<u>REVISED QUANTITY</u>
<u>1600002A</u>	<u>FUEL ADJUSTMENT COST</u>	<u>\$2,422.00 (EST.)</u>	<u>\$28,298.00 (EST.)</u>

PLANS

REVISED PLANS

The following Plan Sheets are hereby deleted and replaced with the like-numbered Plan Sheets:

- 02.01.A1
- 06.B.02.A1

The Bid Proposal Form has been revised to reflect this change.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

SECTION 1.20 – GENERAL CLAUSES FOR FACILITIES CONSTRUCTION

1.20-1.00 – Facilities Construction – General:

Add the following after the first paragraph:

“The Department has determined that this Project is Facilities Construction and therefore Section 1.20 applies.”

Delete the first paragraph and replace with the following:

“The Department has determined that this Project is Facilities Construction and therefore Section 1.20 applies.”

1.20-1.02.04— Facilities Construction – Knowledge of Applicable Laws:

Delete the 5th, 6th, and 7th paragraphs and replace with the following:

“The State Building Code, including latest Connecticut Supplements and Amendment, includes the following:

1. The 2015 International Building Code.
2. The 2015 International Plumbing Code.
3. The 2015 International Mechanical Code.
4. The 2015 International Existing Building Code.
5. The 2015 International Energy Conservation Code.
6. The 2017 NFPA 70 National Electrical Code.
7. The 2009 ICC/ANSI A117.1.

The State Fire Safety Code, including latest Connecticut Supplements and Amendment, includes the following:

1. The 2015 International Fire Code.
2. The 2015 NFPA 101 Life Safety Code.

The State Fire Safety Code, including latest Connecticut Supplements and Amendment, includes the following:

1. The 2015 NFPA 1.”

1.20-1.05.02— Facilities Construction – Contractor Submittals:

Replace #1, #2, #3, #5, #6, #7, #8, #9, #10, and #11 with the following:

1. General: If the plans prepared by the Department do not show complete details, they will show the necessary dimensions and preliminary details, which when used along with the other Contract documents, will enable the Contractor to prepare submittals necessary to complete the Contract work.

The Contractor is required to prepare submittals as Portable Document Format (PDF) files using Bluebeam Revu.

The Contractor is also required to acquire and maintain access to the Department's COMPASS capital project delivery system. The minimum recommended internet speed is 25MB/sec. For reference, the Department's internet speed is 1 GB/sec.

The Contractor shall submit a request for COMPASS access to the Designer. The Department will provide Web-based access to the required number of Contractor users.

The entry/log-in procedure is described in the CT DOT [COMPASS Contractor's User Manual](#).

2. Submittal Preparation and Processing: The Contractor shall:

(a) Coordinate preparation and processing of submittals with performance of construction activities;

(b) Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay;

(c) Coordinate each submittal with fabrication, purchasing, testing, delivery, and other submittals and related activities that require sequential activity;

(d) Provide separate submittal packages by submittal type as single or multi-page PDF's. Submittal types shall be WD, SD, CD, PD, PS, or QA as defined elsewhere. Incomplete submittal packages will be returned to the Contractor without being reviewed. Multi-page PDF's shall be limited to 250 MB; larger PDF files will need to be broken up and contained in the same submittal. "PDF Packages" shall not be submitted via COMPASS.

(e) Provide submittals for related elements of Project work for a concurrent review of all information.

The Contractor shall allow at least 21 calendar days for initial submittal review by the submittal reviewer, and allow additional time for such review if processing must be delayed to permit coordination with subsequent submittals. The submittal review time begins with the submittal upload. If a subsequent submittal is necessary, the Contractor shall allow at least 21 additional calendar days for processing each subsequent submittal. The submittal reviewer reserves the right to withhold action on a submittal if coordination with other submittals is necessary, until all related submittals are received. The submittal reviewer will promptly inform the Contractor when a submittal being processed must be delayed for such coordination.

The Contractor shall allow at least 28 calendar days for outside agency review of any submittal requiring their approval, including but not limited to the following: any utility, FTA, any railroad, DEEP, U.S. Coast Guard, Army Corps of Engineers, FM Global, and any Commissioning Authority.

The Engineer will not authorize an extension of Contract time because of the Contractor's failure to transmit submittals to the submittal reviewer or outside agencies sufficiently in advance of the work to permit processing.

The Contractor shall be limited to one acceptable submittal per product. Once a product has been accepted either as originally specified, or as an "Or Equal" to the product specified, the Contractor may elect to submit a subsequent product for consideration, but the Contractor shall be required to reimburse the Department for all costs associated with reviewing the subsequent request.

The Contractor shall attach a Submittal Transmittal Form to the beginning of each PDF submittal. A blank Submittal Transmittal Form is located in the Appendix of the [COMPASS Contractor's User Manual](#). This form will be used for the Contractor to digitally certify that

“Having reviewed this submittal, I certify that it is complete, accurate, coordinated in all aspects of the item being submitted and conforms to the requirements of the Contract in all respects, including all Federal requirements such as “Buy America”, except as otherwise noted.” The digital certification process is detailed in the CT DOT [COMPASS Contractor's User Manual](#).

3. Transmittal of Submittals: The digitally certified PDF submittal package shall be uploaded into COMPASS using the Submittals/Transmittals application. The submittal process is described in the CT DOT [COMPASS Contractor's User Manual](#). The submittal reviewer will not act on submittals received in any other manner.

The Contractor shall use naming conventions described in the CT DOT [COMPASS Contractor's User Manual](#) unless otherwise directed by the Designer.

For those submittals or portions thereof returned to the Contractor with a “Revise and Resubmit” or “Rejected” workflow status, the Contractor shall use the “Replace File” function described in the CT DOT [COMPASS Contractor's User Manual](#) to properly upload the new version of the submittal document(s).

5. Working Drawings (Delegated Design Submittals) [WD]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit working drawings, signed, sealed and dated by a qualified Professional Engineer licensed to practice in the State of Connecticut, for review.

There will be no direct payment for furnishing any working drawings, procedures or supporting calculations, but the cost thereof shall be considered as included in the general cost of the work.

a. Working Drawings for Permanent Construction: The Contractor shall submit drawings to the Designer on 22 inch × 34 inch sheets with a border and title block similar to the Department standard. Drawings shall be searchable. The first drawing shall include the Contractor’s designer’s Professional Engineer’s digital signature, meeting the requirements of Adobe’s Certified Document Services (CDS) or Adobe’s Approved Trusted List (AATL), and all other drawings shall include a watermark of the Professional Engineer’s stamp in a common area of the border. Calculations, procedures and other supporting data may be submitted in an 8-1/2 inch × 11 inch format and shall be in a single PDF file. The first sheet of calculations shall include the Contractor’s designer’s Professional Engineer’s digital signature, meeting the CDS or AATL requirements. Documents shall be named “Drawings,” “Calculations,” or “Supporting Documentation” as applicable. The Contractor’s designer, who prepares the working drawings, shall secure and maintain at no direct cost to the State a Professional Liability Insurance Policy for errors and omissions in the minimum amount of \$2,000,000 per error or omission. The Contractor’s designer may elect to obtain a policy containing a maximum \$250,000 deductible clause, but if the Contractor’s designer should obtain a policy containing such a clause, they shall be liable to the extent of at least the deductible amount. The Contractor’s designer shall obtain the appropriate and proper endorsement of its Professional Liability Policy to cover the indemnification clause in this Contract, as the same relates to negligent acts, errors or omissions in the Project work performed by them. The Contractor’s designer shall continue this liability insurance coverage for a period of (i) 3 years from the date of acceptance of the work by the Engineer, as evidenced by a State of Connecticut, Department of Transportation form entitled “Certificate of Acceptance of Work,” issued to the Contractor; or (ii) 3 years after the termination of the Contract, whichever is earlier, subject to the continued commercial availability of such insurance. The Contractor shall supply to the Assistant District Engineer a certificate of

insurance in accordance with 1.20-1.03.07 at the time that the working drawings for the Project are submitted.

b. Working Drawings for Temporary Construction: The Contractor shall submit drawings, calculations, procedures and other supporting data in a format acceptable to the Assistant District Engineer.

6. Shop Drawings [SD]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit shop drawings for review. Drawings shall be submitted on 22 inch × 34 inch sheets with an appropriate border and with a title block in the lower right-hand corner of each sheet. Drawings shall be searchable.

Shop Drawings consist of fabrication and installation drawings, roughing-in and setting drawings, schedules, patterns, templates and similar drawings, and wiring diagrams showing field-installed wiring, including power, signal, and control wiring. Standard information prepared without specific reference to the Project shall not be considered to be a Shop Drawing. Shop Drawings shall be project specific.

Shop drawings shall include the following information: Contract number, Project description, number and title of the drawing, date of drawing, revision number, name of Contractor and subcontractor submitting drawings, dimensions, identification of products, shop work manufacturing instructions, design calculations, statement of compliance with Contractual standards, notation of dimensions established by field measurement, notation of coordination requirements, relationship to adjoining construction clearly indicated, seal and signature of a professional engineer if specified, and any other information required by individual Contract provisions.

There will be no direct payment for furnishing any shop drawings, procedures or supporting calculations, but the cost thereof shall be considered as included in the general cost of the work.

7. Coordination Drawings [CD]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit coordination drawings for review. Drawings shall be searchable.

The Contractor shall prepare coordination drawings according to requirements in other Contract provisions, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.

Coordination Drawings shall include Project-specific information drawn accurately to a scale large enough to indicate and resolve conflicts. Coordination Drawings shall not be based on standard printed data. Coordination Drawings shall include the following information, as applicable: (1) use applicable plans as a basis for preparation of Coordination Drawings and prepare sections, elevations, and details as needed to describe relationship of various systems and components; (2) coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review; (3) indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems; (4) indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation; (5) show location and size of access doors required for access to concealed dampers, valves, and other controls; (6) indicate required installation sequences; (7) indicate dimensions shown on the plans, specifically noting dimensions that appear to be in conflict with submitted equipment and

minimum clearance requirements, and (8) provide alternate sketches to the Designer indicating proposed resolution of such conflicts. The Contractor shall ensure the Coordination Drawings are signed by each installer, indicating their approval prior to submission.

There will be no direct payment for furnishing any coordination drawings, but the cost thereof shall be considered as included in the general cost of the work.

8. Product Data [PD]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit product data for review in a PDF file.

The Contractor shall provide all product data in a single submittal for each element of construction or system and shall mark each submittal with the Contract item number.

The Contractor shall mark each copy of a product data submittal to show applicable choices and options. Where product data includes information on several products that are not required, copies shall be marked to indicate the applicable information. Product data shall include the following information and confirmations to the extent applicable: manufacturer's printed recommendations, compliance with recognized trade association standards, compliance with recognized testing agency standards, application of testing agency labels and seals, notation of coordination requirements, and any other information required by the individual Contract provisions.

There will be no direct payment for furnishing any product data, but the cost thereof shall be considered as included in the general cost of the work.

9. Product Samples [PS]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit product samples for review.

Product Samples are samples submitted for review and action by the Designer, which are: (1) physically identical to the proposed product or material cured and finished as required by the Contract; or (2) submitted for review of kind, color, pattern, thickness, and texture. Samples shall be used for a final check of these characteristics with other elements, and for a comparison of the characteristics of the approved sample with those of the actual component as delivered and installed.

The following information shall be submitted with product samples to the extent applicable: Contract number; Project description; generic description of the sample (name or trade reference, type or quality or grade, and any further designation necessary to identify the items or materials); sample source; product name; manufacturer's name; confirmation of availability; and anticipated delivery time.

In conjunction with the submission of physical product samples, a digital photograph of the sample shall be uploaded into COMPASS.

The Designer will retain one set of the samples, transmit one set of same to the Engineer. The Engineer will retain the samples at the Project Site for quality comparisons throughout the duration of the Project.

There will be no direct payment for furnishing any product samples, but the cost thereof shall be considered as included in the general cost of the work.

10. Quality Assurance Submittals [QA]: When required by the Contract, or when ordered to do so by the Engineer, the Contractor shall prepare and submit quality assurance submittals for review in a single PDF file.

Quality assurance submittals consist of qualification data, design data, certifications, manufacturer's instructions, manufacturer's field reports, test reports, Material Safety Data

Sheets (MSDSs), and other quality assurance information required by individual Contract provisions.

Where Contract provisions require certification that a product, material, or installation complies with specified requirements, the Contractor shall submit a notarized certification from the manufacturer certifying said compliance. An officer of the manufacturer or other individual authorized to sign documents on behalf of the company shall sign the certification.

Where Contract provisions require the Contractor shall provide a certification letter on the manufacturer's letterhead to certify that asbestos is not contained in the materials.

The manufacturer certification letter shall be formatted in the following manner: [Addressed to:] Commissioner of Transportation Department of Transportation P.O. Box 317546 Newington, Connecticut 06131-7546 Project Title and Number [We] hereby certify that all materials manufactured by [Insert Manufacturer Name] are asbestos-free. [Signature:] [Name of authorized signatory] [Title]

Submittals associated with these materials will not be reviewed without the required manufacturer certification letter.

There will be no direct payment for furnishing any quality assurance submittals, but the cost thereof shall be considered as included in the general cost of the work.

11. Submittal Reviewer's Action: The Designer or Engineer will review each submittal, mark each with a uniform, self-explanatory action stamp, and return the stamped submittal promptly to the Contractor. The stamp will be marked as follows to indicate the action taken:

(a) If submittals are marked "No Exceptions Noted," the Designer or Engineer has not observed any statement or feature that appears to deviate from the Contract requirements. This disposition is contingent on being able to execute the manufacturer's written warranty in compliance with the Contract provisions.

(b) If submittals are marked "Exceptions as Noted," the considerations or changes noted by the Designer or Engineer are necessary in order for the submittal to comply with Contract requirements. This disposition is contingent on being able to execute the manufacturer's written warranty in compliance with the Contract provisions.

(c) If submittals are marked "Revise and Resubmit," the Contractor shall revise and resubmit the submittal to address the deficiencies or provide additional information requested by the Designer or Engineer

(d) If submittals are marked "Rejected," the Contractor shall prepare and submit a new submittal in accordance with the Designer's notations.

(e) If submittals are primarily for information or record purposes, the Designer will return the submittal marked "No Action Required." This disposition is contingent on being able to execute the manufacturer's written warranty in compliance with the Contract provisions.

The Contractor shall not proceed with the part of the Project covered by the submittal until the submittal is marked "No Exceptions Noted," "Exceptions as Noted," or "No Action Required" by the Designer or the Engineer. The Contractor shall retain sole responsibility for compliance with all Contract requirements.

The Contractor shall print 1 color copy of each submittal marked "No Exceptions Noted," "Exceptions as Noted," or "No Action Required" to the Assistant District Engineer for use by the Engineer within 7 calendar days of the completed submittal review. The Contractor shall not perform physical work related to the submittal until the 2 color copies are provided to the Assistant District Engineer.

The Contractor shall mark up one set of Working Drawings (including any related calculations), Shop Drawings, and Coordination Drawings and retain them as a “Record Document.”

Maintenance manuals and warranties will not be returned unless they are Rejected.”

1.20-1.05.07—Facilities Construction – Coordination with Work by Other Parties:

Add the following after the last paragraph:

“The Contractor is hereby advised of the Engineer’s and the Department personnel’s intent to use the existing vehicle repair bays, the specialty repair bays, maintenance bays, and the weld shop until the Department accepts and occupies the replacement spaces. The Contractor shall cooperate with the Engineer during construction operations to minimize conflicts and facilitate Engineer and Department personnel usage. The Contractor, the Engineer, and the Department personnel will coordinate construction operations and Department operations on a daily basis, if necessary.”

1.20-1.05.08— Facilities Construction – Schedules and Reports:

Delete the first sentence and replace with the following:

“Transmittals of Schedules: The schedule package shall be uploaded into COMPASS using the Submittals/Transmittals application. The submittal process is described in of the CT DOT [COMPASS Contractor's User Manual](#).

The Contractor shall use naming conventions described in the CT DOT [COMPASS Contractor's User Manual](#) unless otherwise directed by the Designer.

When a project coordinator is not required by the Contract the following shall apply:”

1.20-1.05.23 – Facilities Construction – Requests for Information (RFI’s) and Requests for Change (RFC’s):

Delete the first paragraph and replace with the following:

“The Contractor shall upload all RFIs and RFCs into COMPASS using the Submittals/Transmittals application. The submittal process is described in the CT DOT [COMPASS Contractor's User Manual](#).

The Contractor shall use naming conventions described in the CT DOT [COMPASS Contractor's User Manual](#) unless otherwise directed by the Designer.

The Engineer will forward the RFI or RFC to the Designer for review. Upon receipt of an RFI or RFC, the Designer will attempt to determine if additional information is required from the Contractor to respond to the RFI or RFC and request said information from the Engineer.”

1.20-1.06.08 – Facilities Construction – Warranties

Delete paragraph 8 starting “Prior to the date for the Substantial Completion Inspection to the end of the Article.

“Prior to the date of the Substantial Completion Inspection, the Contractor shall compile each required warranty, properly executed by the Contractor or any other required party. The warranties shall be uploaded into COMPASS using the Submittals/Transmittals application. The submittal process is described in the CT DOT [COMPASS Contractor's User Manual](#).

The Contractor shall use naming conventions described in the CT DOT [COMPASS Contractor's User Manual](#) unless otherwise directed by the Designer.

The Contractor shall submit warranties in PDF format, assembling the complete warranty submittal package into a single electronic PDF file with bookmarks enabling navigation to each item and providing a bookmarked table of contents at beginning of document. The Contractor shall place the warranty documents in an orderly sequence based on the organization of the Contract provisions (including specific CSI-formatted specifications contained within a particular Special Provision). Multi-page PDF's shall be limited to 250 MB; larger PDF files will need to be broken up and contained in the same submittal. “PDF Packages” shall not be submitted via COMPASS.

The Contractor shall include a description of the product or installation, including the name of the product, and the name, address and telephone number of the Contractor or pertinent subcontractor.

The Contractor shall furnish to the Department a written warranty for all Project work accompanied by a cover letter with the following contents:

[Addressed to:] Commissioner of Transportation Department of Transportation P.O. Box 317546 Newington, Connecticut 06131-7546 Project Title and Number [We] hereby warrant all materials and workmanship for all work performed under this Contract for a period of one (1) year from [date of issuance of C.O.C.] against failures of workmanship and materials in accordance with the Contract. Furthermore, as a condition of this warranty, [we] agree to have in place all insurance coverage identified in the Contract for the performance of any warranty work. [Signature:] [Name of authorized signatory] [Title]

Upon determination by the Engineer that Project work covered by a warranty has failed, the Contractor shall replace or rebuild the work to an acceptable condition complying with Contract requirements. The Contractor is responsible for the cost of replacing or rebuilding defective construction or components and those which may have needed to be damaged or removed in order to cure the defective work including costs of material, equipment, labor, and material

disposal, regardless of whether or not the State has benefited from use of the work through a portion of its anticipated useful service life. The Contractor shall respond to the Project Site when Project work covered by a warranty has failed within 3 calendar days, unless in the Engineer's opinion said failure is deemed to be an emergency, in which case the Contractor shall respond to the Project Site as directed by the Engineer.

When Project work covered by a warranty has failed and been corrected by replacement or rebuilding, the Contractor shall reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the time that remains on the original warranty period at the time of the failure."

1.20-1.08.01—Facilities Construction – Transfer of Work or Contract:

Replace "25%" with "30%" in the first sentence.

1.20-1.08.02—Facilities Construction – Establishment of Construction Field Office:

Delete the second paragraph.

1.20-1.08.03—Facilities Construction – Prosecution of Work:

Add the following as a new section 6:

"6. Project Phasing: Although the Contractor is responsible for developing its own phasing plan for the Engineer's approval for the Project work, the phasing plan requires certain Project work to be performed during specific time periods as defined within the contract plan sheets (SD-003-SD-005).

1.20-1.08.04—Facilities Construction – Limitation of Operations:

Add following the last paragraph.

"The Contractor shall repair at its own expense any and all damage caused by construction operations to existing buildings unless said damage is scheduled as part of the Project work. The Contractor shall take all precautions necessary to protect the building and its occupants during the construction period. Access to the existing building for purposes of demolition work will not be granted until Final Inspection of the new facilities has been completed (and/or as directed by engineer) and the new facilities are capable of being occupied by the Department without deterring the Department's employees from performing their assigned work.

During all times that the Project Site is occupied by the Engineer and Department personnel, the Contractor shall maintain the following utilities and services to the extent described to permit Department operations:

1. Electrical Service: The Department will be responsible for paying all monthly electrical utility usage costs related to the existing facilities occupied by Department personnel (unless otherwise noted). For this reason, temporary electric heat will not be permitted to be used on this Project. Additionally, the Contractor shall be responsible for paying all monthly electrical usage utility costs related to their construction field office.
2. Telephone Service: The Department will be responsible for paying all monthly telephone utility usage costs related to the existing facilities occupied by Department personnel. The Contractor shall be responsible for paying all monthly telephone utility usage costs related to their construction field office.
3. Water Service: The Contractor shall install and maintain water services to the existing facility while existing facility is in use. The Department will be responsible for paying all monthly water service utility usage costs.
4. Bay Area Drainage: Vehicle Repair Bay, Maintenance Bay, Specialty Repair Bay, and the Weld Shop drainage systems shall remain operational at all times when said spaces are occupied by Department personnel. Unless the Contractor's work negatively impact the oil-water separator, the Department is responsible for maintenance of the oil-water separator. While the oil-water separator is not monitored by a tank monitoring system, the Department will check the oil level on a monthly basis and empty it as necessary.
5. Sanitary Drainage: The existing repair facility sanitary piping/ system shall remain operational at all times. The Department will be responsible for paying all monthly utility usage costs.
6. Compressed Air System: The Contractor shall keep the compressed air system in the Vehicle Repair Bays, Specialty Repair Bays, and the Weld Shop operational.
8. Waste Oil Tank (Existing): The Contractor shall keep the existing underground waste oil tank operational until they complete the Repair Facility.
9. Tank Monitoring System (Existing): The Contractor shall keep the existing tank monitoring system operational until they complete Phase 1 and Phase 2 of construction. The temporary fueling tank monitoring system shall be operational before the existing tank monitoring system is taken out of service.

The Contractor is hereby advised of the need to perform the following Project work related to the existing building when the building is unoccupied to minimize the impacts to the Department Personnel, unless otherwise approved by the Engineer:

1. Asbestos abatement.
2. All demolition, salvage of materials, and lead remediation.

The existing motor fuel island shall be operational to permit gasoline and diesel fueling operations at all times throughout Phase 1 and Phase 2 of construction. The existing motor fuel island shall be accessible by Department personnel at all times during these phases of construction. The temporary diesel fueling shall be fully operational before the existing motor fuel is taken out of service before/ during Phase 3 of construction.

At the end of the fuel island relocation, the complete motor fuel island and tank monitoring system associated with the gasoline, diesel fuel, and DEF tanks shall be fully operational. The tank monitoring system shall be accessible by Department personnel at all times.

1.20-1.08.14 – Facilities Construction – Acceptance of Project

Delete 4. Operation and Maintenance Manuals down to “Product Maintenance Manual” and replace with the following:

“4. Operation and Maintenance Manuals: Prior to the date of the final Semi-Final Inspection, the Contractor shall compile operation and maintenance manuals in the form of instructional manuals for use by the Owner. The operation and maintenance manuals shall be uploaded into COMPASS using the Submittals/Transmittals application. The submittal process is described in the CT DOT [COMPASS Contractor's User Manual](#).

The Contractor shall use naming conventions described in the CT DOT [COMPASS Contractor's User Manual](#) unless otherwise directed by the Designer.

The Contractor shall submit manuals in the form of a multi-page PDF format for each manual type required using electronic files prepared by the manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable size. The Contractor shall place the warranty documents in an orderly sequence based on the organization of the Contract provisions (including specific CSI-formatted specifications contained within a particular Special Provision). Multi-page PDF's shall be limited to 250 MB; larger PDF files will need to be broken up and contained in the same submittal. “PDF Packages” shall not be submitted via COMPASS.

For each manual, the Contractor shall:

- (a) Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- (b) Provide a title page as the first page of each manual with the following information: subject matter covered by the manual; Contract number and title; date of submittal; name, address, and telephone number of the Contractor; and cross-reference to related systems in other sections.
- (c) Provide a table of contents, arranged systematically according to the organization of the Contract provisions (including specific CSI-formatted specifications within a particular Special Provision).
- (d) Provide a general information section immediately following the table of contents, listing each product included in the manual, identified by product name. The Contractor shall list the name, address, and telephone number of the subcontractor, the maintenance contractor, and the local source for replacement parts and equipment for each product.
- (e) Include manufacturer's standard data and mark each sheet to identify each part or product included in the Project, identify each product using appropriate references from the

- Contract, and delete references to information that is not applicable. The use of project record documents as part of operation and maintenance manuals is not permitted.
- (f) Prepare supplementary text to provide operation and maintenance information when the manufacturer's standard data is not available or the data is insufficient and the information is necessary for proper operation and maintenance of equipment or systems, organize text in a consistent format under separate headings for each procedure, and provide a logical sequence of instruction for each operation or maintenance procedure.
 - (g) Provide drawings where necessary in order to supplement manufacturer's data to illustrate the relationship of component parts of equipment or systems or to provide control or flow diagrams. The Contractor shall coordinate these drawings with information contained in project record drawings to ensure correct illustration of the completed installation. The use of Project record documents as part of operation and maintenance manuals is not permitted.
 - (h) Provide estimated life cycle costs to maintain each product included in the manual to reach maximum useful life (i.e. annual, mid-life overhaul, end of life overhaul, or programmed interval replacement)."

Delete the last 2 paragraphs of 5. Training ("The Contractor shall submit ... owner for unlimited reproduction.") and replace with the following:

"The Contractor shall video record each training session."

SECTION 302000 – GENERAL SITE WORK

PART 1 - GENERAL

1.1 SUMMARY:

A. Section Includes:

1. Asphalt Storage Shed
2. Bollard
3. Concrete Apron
4. Concrete Pad
5. Concrete Washout Area
6. Concrete Wheel Stop
7. Controlled Low Strength Material (Flowable Fill)
8. CORS Station
9. Flagpole
10. Fuel Island Canopy
11. Furnishing, Planting and Mulching Trees, Shrubs, Vines and Ground Cover Plants
12. No.3 Crushed Stone
13. Peastone Gravel Backfill
14. Steel Bollard
15. Storage Container

1.2 ACTION SUBMITTALS:

A. Submit the following in accordance with Form 818 Article 1.20-1.05.02 and NOTICE TO CONTRACTOR – SUBMITTALS.

B. Product Data: For each type of product indicated.

1. Asphalt Storage Shed
2. Bollard
3. Flagpole
4. Fuel Island Canopy
5. Furnishing, Planting and Mulching Trees, Shrubs, Vines and Ground Cover Plants
6. Steel Bollard

C. Shop Drawings: For each type of product indicated.

1. Asphalt Storage Shed
2. Concrete pad.
3. CORS Station

- D. Working Drawings: For each type of product indicated.
 - 1. Fuel Island Canopy

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. ASPHALT STORAGE SHED: Storage Container Cover shall be MODEL R35 with outside connection as manufactured by 'SteelMaster' or approved equal. Storage Container Cover to be Grounded. Storage Container Cover mounting equipment and hardware dimensions comply with manufacturer's specifications.
- B. BOLLARD:
 - 1. Steel bollard: Schedule 80 galvanized steel pipe, 8 inch nominal size (8.625" O.D.), conforming to the requirements of ASTM-A53.
 - 2. Concrete: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete".
 - 3. Polyethylene sleeve. Bumper (Bollard) Post Sleeve #PLS1009, as manufactured by New Pig Corporation or approved equivalent. Sleeve shall be yellow in color with 1/4"-thick polyethylene shell.
- C. CONCRETE APRON:
 - 1. Concrete: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete".
 - 2. Steel Reinforcement: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete" Section 2.2.
 - 3. Water Repellants: Comply with requirements of CSI Division 07, Section 071900, "Water Repellants".
- D. CONCRETE PAD:
 - 1. Concrete: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete".
 - 2. Steel Reinforcement: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete" Section 2.2.
 - 3. Water Repellants: Comply with requirements of CSI Division 07, Section 071900, "Water Repellants".
- E. CONCRETE WASHOUT AREA: Refer to Contract Plan Sheets for requirements related to this work.
- F. CONCRETE WHEEL STOP:

1. Concrete: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete", amended as follows:
 - a. Concrete shall have a minimum 28 day compressive strength of 4000 psi.
 - b. Reinforcement bars shall meet the requirements of Form 818, Article M.06.01.

G. CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL):

1. Materials: All materials utilized in the CLSM mix design shall be in accordance with the applicable requirements of Article M.03.01
 - a. Composition: The composition of the CLSM shall be in accordance with the requirements set forth in Article M.03.01-General Composition of Concrete Mixes, as well as the applicable sections of ACI 229R. The Contractor shall submit each proposed mix design, with all supporting data, to the Engineer for review and approval at least two weeks prior to its use.
 - b. The setting time of CLSM materials shall be designed so as to achieve the strength necessary to comply with the time constraints called for under the Maintenance and Protection of Traffic requirements of the project specifications. The use of chloride accelerators is not permitted.
 - c. The minimum compressive strength of the CLSM material shall be 30 pounds per square inch (psi) and the maximum compressive strength of the CLSM shall be 150 pounds per square inch (psi) when tested in accordance with ASTM D4832 after 56 days.
 - d. The CLSM mix design shall utilize a nominal maximum size of No. 8 aggregate as specified in M.01.01.
 - e. CLSM mixes shall have a minimum of 20% entrained air when tested in accordance with AASHTO T152.

H. CORS STATION:

1. Concrete: Shall meet the requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete". Class F.
2. Steel Reinforcement: Comply with requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete" Section 2.2.
3. Water Repellants: Comply with requirements of CSI Division 07, Section 071900, "Water Repellants".
4. Mast Steel: ASTM A36 Grade 50.
5. Steel for Anchor Bolts and Fasteners: ASTM F1554 Galvanized.
6. Grounding and Bonding: Comply with requirements of CSI Division 26 Section 260526, "Grounding and Bonding for Electrical Systems"
7. Raceways and Boxes: Comply with requirements of CSI Division 26 Section 260533, "Raceways and Boxes for Electrical Systems".
8. Conduit installed in trench: Comply with requirements of Division 26 Section 260543, "Underground Ducts and Raceways for Electrical Systems".
9. Power and Communication: Comply with requirements of Division 26 Section 262726, "Wiring Devices"

- I. **FLAGPOLE:** Flagpoles shall be ESR40C71 as manufactured by American Flagpole or approved equal. Poles shall be tapered aluminum tubing and shall measure 40'-0" high from the finished grade. Provide standard revolving truck and cleat and 6" ball. Provide copper clad lightning rod. Flagpole foundation shall meet the requirements of CSI Division 03, Section 033000 "Cast-in-Place Concrete". Flagpole foundation dimensions shall comply with manufacturer's specifications.
- J. **FUEL ISLAND CANOPY:** Canopy shall be a 'Delegated Design' based on Austin Mohawks & Company DWG NO. 04-032, 36' X 86' X 6 Column Canopy with a minimum clearance of 16' or approved equal.
 - 1. Provide 8 Cree CAN-304-SL-RS-06-E-UL-WH-700 304 Series Recessed LED Canopy Lights with Fixtures evenly spaced or approved equal.
- K. **FURNISHING, PLANTING AND MULCHING TREES, SHRUBS, VINES AND GROUND COVER PLANTS:**
 - 1. Comply with the requirements of Form 818 Article 09.49.02.
- L. **NO.3 CRUSHED STONE:** Crushed stone shall be the product resulting from the artificial crushing of rocks, boulders or larger cobblestones, substantially all faces of which have resulted from the crushing operation. Crushed stone shall consist of sound, tough, durable stone, reasonably free from soft, thin, elongated, laminated, friable, micaceous or disintegrated pieces, mud, dirt or other deleterious material and shall be sized to meet the requirements of Form 818, Article M.01.01.
- M. **PEASTONE GRAVEL BACKFILL:** Peastone gravel backfill shall be composed entirely of uncrushed stone sized rounded particles conforming to Section M.01.01 of the Form 818, Grading No. 6 unless otherwise specified by the tank manufacturer for compliance with the tank warranty.
- N. **STEEL BOLLARD:**
 - 1. Steel bollard: Schedule 40 galvanized steel pipe, 4 inch outside diameter, conforming to the requirements of ASTM-A53.
 - 2. Concrete: Shall meet the requirements of CSI Division 03, Section 033000, "Cast-in-Place Concrete". Class F.
 - 3. Paint: Bollard shall be primed and finished with "Highway Safety Yellow" rust preventive metal paint.
- O. **STORAGE CONTAINERS:**
 - 1. The storage containers shall have a minimum of 400 square feet of floor space and a ceiling height of 7 feet. Storage containers shall be weatherproof and of all steel construction with integral steel skids for

- ground level placement and accessibility. Tractor-trailer storage is not acceptable.
2. Storage containers shall include heavy-duty double steel doors with locking bars located at one end of unit. Doors shall include provisions for Owner supplied padlocks.

PART 3 - EXECUTION

3.1 EXECUTION:

- A. **ASPHALT STORAGE SHED:** Install Storage Container Cover in location shown on the plans. Storage Container Cover to be installed on standard concrete blocks (2.5' X 2.5' X 5') stacked two high arranged to fit cover with back wall. All materials shall be installed in strict accordance with the manufacturer's recommendations.
- B. **BOLLARD:** Bollards shall be installed in the locations shown on the plans. The steel pipe shall be securely set plumb in concrete and filled with concrete. The polyethylene sleeve shall be installed as recommended by the manufacturer.
- C. **CONCRETE APRON:** Comply with CSI Division 03, Section 033000, "Cast-in-Place Concrete. Aprons shall be constructed at the locations and to the dimensions shown on the plans.
- D. **CONCRETE PAD:** Comply with CSI Division 03, Section 033000, "Cast-in-Place Concrete. Pads shall be constructed at the locations and to the dimensions shown on the plans.
- E. **CONCRETE WASHOUT AREA:** Refer to Contract Plan Sheets for requirements related to this work.
- F. **CONCRETE WHEEL STOP:** Concrete wheel stops shall be placed on the final layer of bituminous concrete pavement. The layout of concrete wheel stops shall be as shown on the plans and coordinated with the final pavement markings. Anchor dowels shall be driven flush with the top of the wheel stops.
- G. **CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL):** CLSM shall only be placed when the ambient temperature is at least 32° F and rising. CLSM material shall be deposited within 2 hours of initial mixing. CLSM may be placed by chutes, conveyors, buckets or pumps depending upon the application and accessibility of the site. Should voids or cavities remain after the placement of the CLSM, the Contractor shall modify the placement method or flow characteristics of the CLSM.

Voids or cavities which have not been filled properly shall be corrected as directed by the Engineer and at the Contractor's expense.

- H. **CORS STATION:** Refer to Contract Plan Sheets for requirements related to this work. The welding shall be accordance with the current AWS code. Steel mast, gussets, and base plate shall be welded prior to hot dip galvanizing as a single piece in accordance with ASTM A153. The contract shall notify call before you dig prior to any excavation work. Work performed shall be coordinated with the Office of Central Surveys and performed under their supervision. Coordinate with the engineer.

- I. **FLAGPOLE:** Install flagpole in location shown on the plans. All materials shall be installed in strict accordance with the manufacturer's recommendations.

- J. **FUEL ISLAND CANOPY:** Refer to Contract Plan Sheets for requirements related to this work.
 - 1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - 2. All work related to the demolition required for the construction of the canopy to be included under this pay item
 - 3. All work related to the reinstallation of the fuel island equipment to be included under this pay item.

- K. **FURNISHING, PLANTING AND MULCHING TREES, SHRUBS, VINES AND GROUND COVER PLANTS:**
 - 1. All work under Form 818 Section 9.49 shall be performed in accordance with the latest edition of the ANSI A300 (Part 6).
 - 2. **Watering:** All plants must be kept moist and be watered during the period from June 1 through October 31. The contractor shall submit verification of this work each month during the establishment period to ensure the minimum requirements have been met. The engineer may direct the contractor to provide additional water if drought conditions exist.
 - 3. **One-Year Establishment Period:** Acceptance of all work under Section 9.49 for full payment shall be conditional on the successful completion of a 1-Year Establishment Period, as determined by the Engineer. The establishment period shall consist of a minimum of one full calendar year that will begin only after all plant materials specified in the Contract have been planted, and all initial planting operations have been accepted. The establishment period may extend past one calendar to coordinate the inventory and replacement. An inventory of all plant material will be

conducted in the spring after plants have leafed out, or in the late summer after the warmest weather has past, and include the Contractor, the Engineer and the Landscape Designer. At this time the acceptability of the plant establishment as well as a list of corrective measures will be determined. The Contractor is responsible for procuring contract items for replacement and should take steps prior to receiving the inventory. The Contractor shall submit a plan for performing replacement work, which must include a thorough watering after planting. Replacement plants are subject to inspection before installation, and corrective measures must be approved before final acceptance.

- L. **NO.3 CRUSHED STONE:** No. 3 crushed stone shall be deposited in layers not over 6” in depth, with each layer thoroughly compacted before the addition of other layers. Stone shall be placed in the locations and to the dimensions shown on the plans.

- M. **PEASTONE GRAVEL BACKFILL:** Material shall be clean, dry and free from ice and snow, and shall be installed in accordance with the tank manufacturer's recommendations and as indicated on the Drawings, stated herein in the Specifications or as directed by the Engineer.
 - 1. **Underground Tanks:** Provide a minimum of 12-inches of peastone gravel bed for tanks. At start of backfilling, care must be taken to work material completely beneath the bottom of the tanks and underneath the end caps to provide adequate support. Backfill completely over the top of tanks, up to the bottom of the concrete apron. Peastone gravel should be added and compacted in 12-inch lifts.

- N. **STEEL BOLLARD:** Bollards shall be installed in the locations shown on the plans. The steel pipe shall be securely set plumb in concrete and shall comply with the manufacturer’s recommendations.

- O. **STORAGE CONTAINERS:** The Contractor shall locate the storage containers where shown on the plans and as directed by the Engineer.

END OF SECTION 302000