

SECTION 01340SUBMITTALSPART 1 - GENERAL1.1 DESCRIPTION

## A. Work Included:

1. Submit to the Engineer, Shop Drawings, Operation and Maintenance Manuals, Manufacturers' Certificates, Project Data, and Samples required by the Specification Sections.

## B. Related Work Specified Elsewhere:

1. Construction Schedules: Section 01310
2. Project Record Documents: Section 01720
3. General Conditions: Section 00700.

1.2 SHOP DRAWINGS

- A. Shop Drawings are required for each and every element of the work. Each shop drawing shall be assigned a sequential number for purposes of easy identification, and shall retain its assigned number, with appropriate subscript, on required resubmissions.
- B. Shop Drawings are generally defined as all fabrication and erection drawings, diagrams, brochures, schedules, bills of material, manufacturers data, spare parts lists, and other data prepared by the Contractor, his subcontractors, suppliers, or manufacturers which illustrate the manufacturer, fabrication, construction, and installation of the work, or a portion thereof.
- C. The Contractor shall submit to the Engineer a minimum of six (6) copies of Shop Drawings and approved data. The Engineer will retain three (3) copies (for Owner's, Engineer's and Field Representative's files) and return three (3) copies to the Contractor for distribution to subcontractors, suppliers and manufacturers. If the Contractor requires more than three (3) then the number of copies submitted shall be adjusted accordingly. The only exception to the above is that all shop drawings which incorporate blue line type drawings shall be submitted with only one good quality reproducible. The Engineer will return the one marked up reproducible to the Contractor.
- D. The Contractor shall provide a copy of the completed Submittal Certification Form (copy provided for Contractor's use at the end of this Specification Section) which shall be attached to every copy of each shop drawing. Shop Drawings shall show the principal dimensions, weight, structural and operating features, space required, clearances, type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the drawing. When it is customary to do so, when the dimensions are of particular importance, or when so specified, the drawings shall be certified by the manufacturer or fabricator as correct for the work.
- E. Shop Drawings shall be submitted as a complete package by specification section, unless otherwise reviewed and approved by the Engineer. It is the intent that all information, materials and samples associated with each specification section be included as a single submittal for the Engineer's review. Any deviation from this

requirement, such as submitting miscellaneous metals grouped by structure, shall be requested in writing prior to any associated submittal.

- F. The Contractor shall be responsible for the prompt and timely submittal of all shop and working drawings so that there shall be no delay to the work due to the absence of such drawings.
- G. No material or equipment shall be purchased or fabricated especially for the Contract until the required shop and working drawings have been submitted as hereinabove provided and reviewed for conformance to the Contract requirements. All such materials and equipment and the work involved in their installation or incorporation into the Work shall then be as shown in and represented by said drawings.
- H. Until the necessary review has been made, the Contractor shall not proceed with any portion of the work (such as the construction of foundations), the design or details of which are dependent upon the design or details of work, materials, equipment or other features for which review is required.
- I. All shop and working drawings shall be submitted to the Engineer by and/or through the Contractor, who shall be responsible for obtaining shop and working drawings from his subcontractors and returning reviewed drawings to them. Shop drawings shall be of standardized sizes to enable the Owner to maintain a permanent record of the submissions. Approved standard sizes shall be: (a) 24 inches by 36 inches; (b) 11 inches by 17 inches, and (c) 11 inches by 8-1/2 inches. Provision shall be made in preparing the shop drawings to provide a binding margin on the left hand side of the sheet. Shop drawings submitted other than as specified herein may be returned for resubmittal without being reviewed.
- J. Only drawings which have been checked and corrected by the fabricator should be submitted to the Contractor by his subcontractors and vendors. Prior to submitting drawings to the Engineer, the Contractor shall check thoroughly all such drawings to satisfy himself that the subject matter thereof conforms to the Drawings and Specifications in all respects. All drawings which are correct shall be marked with the date, checker's name, and indication of the Contractor's approval, and then shall be submitted to the Engineer.
- K. If a shop drawing shows any deviation from the Contract requirements, the Contractor shall make specific mention of the deviations in his letter of transmittal.
- L. Should the Contractor submit equipment that requires modifications to the structures, piping, electrical conduit, wires and appurtenances, layout, etc., detailed on the Drawings, he shall also submit details of the proposed modifications. If such equipment and modifications are accepted, the Contractor, at no additional cost to the Owner, shall do all work necessary to make such modifications.
- M. A maximum of two submissions of each Shop Drawing will be reviewed, checked, and commented upon without charge to the Contractor. Any additional submissions which are ordered by the Engineer to fulfill the stipulations of the Drawings and Specifications, and which are required by virtue of the Contractor's neglect or failure to comply with the requirements of the Drawings and Specifications, or to make those modifications and/or corrections ordered by the Engineer in the review

of the first two submissions of each Shop Drawing, will be reviewed and checked as deemed necessary by the Engineer, and the cost of such review and checking, as determined by the Owner, and based upon Engineer's documentation of time and rates established for additional services in the Owner-Engineer Agreement for this Project, may be deducted from the Contractor to make all modifications and/or corrections as may be required by the Engineer in an accurate, complete, and timely fashion.

1.3 SAMPLES

- A. The Contractor shall submit samples when requested by the Engineer to establish conformance with the specifications, and as necessary to define color selections available.

1.4 OPERATION AND MAINTENANCE MANUALS

- A. The Contractor shall furnish the Engineer four (4) copies of a complete instruction manual for installation, operation and maintenance of each item specified. At least 3 months prior to the expected substantial completion date, the Contractor shall submit to the Engineer all manuals in accordance with the requirements specified herein.
- B. Manuals shall include operating and maintenance information on all systems and pieces of equipment. The manual shall contain sufficient data to install, operate, maintain and repair all components of the equipment, design data specific to the project. All information required by the Operations and Maintenance Manual Certification Form described herein and any additional information deemed necessary by the Owner and Engineer for proper installation, operation and maintenance.
- C. The Contractor shall provide a copy of the complete Operations and Maintenance Manual Certification Form (copy provided for the Contractor's use at the end of this Specification Section) which shall be attached to every copy of each Operations and Maintenance Manual submitted.

1.5 MANUFACTURER'S CERTIFICATES

- A. Prior to accepting the installation, the Contractor shall submit manufacturer's certificates for each item specified.
- B. Such manufacturer's certificates shall state that the equipment has been installed under either the continuous or periodic supervision of the manufacturer's authorized representative, that it has been adjusted and initially operated in the presence of the manufacturer's authorized representative, and that it is operating in accordance with the specified requirements, to the manufacturer's satisfaction. All costs for meeting this requirement shall be included in the Contractor's bid price.

1.6 SUBMISSION REQUIREMENTS

- A. Accompany submittals with transmittal letter, containing:
  - 1. Date.

2. Project title and number.
  3. Contractor's name and address.
  4. The number of each Shop Drawing, Project Data and Sample submitted.
  5. Notification of deviations from Contract Documents.
  6. Other pertinent data.
- B. A completed Submittal Certification Form shall be attached to each copy of each shop drawing and must include:
1. Identification of deviations from Contract Documents.
  2. Contractor's stamp, initialed or signed, certifying review of the submittal, verification of field measurements and compliance with Contract Documents.
  3. Where specified or when requested by the Engineer, manufacturer's certification that equipment, accessories and shop painting meet or exceed the Specification requirements.
  4. Where specified, manufacturer's guarantee.

1.7 RESUBMISSION REQUIREMENTS

- A. Revise initial drawings as required and resubmit as specified for initial submittal.
- B. Indicate on drawings any changes which have been made other than those required by Engineer.

1.8 ENGINEER'S REVIEW

- A. The review of shop and working drawings hereunder will be general only, and nothing contained in this specification shall relieve, diminish or alter in any respect the responsibilities of the Contractor under the Contract Documents and in particular, the specific responsibility of the Contractor for details of design and dimensions necessary for proper fitting and construction of the work as required by the Contract and for achieving the result and performance specified thereunder.

SUBMITTAL CERTIFICATION FORM

PROJECT: \_\_\_\_\_ CONTRACTOR'S PROJ. NO: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ ENGINEER'S PROJ. NO: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

TRANSMITTAL NUMBER: \_\_\_\_\_ SHOP DRAWING NUMBER: \_\_\_\_\_

SPECIFICATION SECTION OR DRAWING NO: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

MANUFACTURER: \_\_\_\_\_

The above referenced submittal has been reviewed by the undersigned and I/we certify that the material and/or equipment meets or exceeds the project specification requirements with

NO DEVIATIONS

or

A COMPLETE LIST OF DEVIATIONS AS FOLLOWS<sup>a</sup>:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

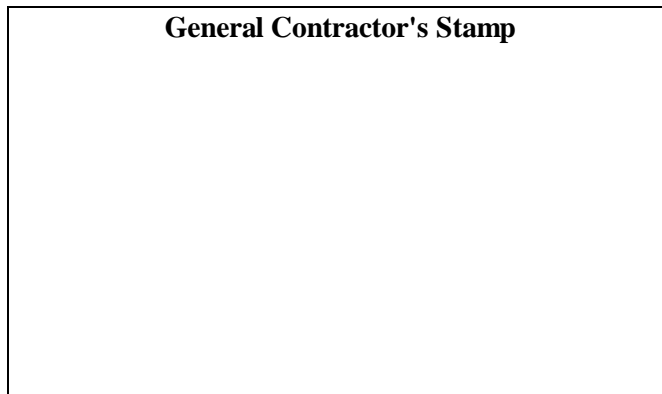
By: \_\_\_\_\_ By: \_\_\_\_\_  
Contractor<sup>b</sup> Manufacturer<sup>c</sup>

Date: \_\_\_\_\_ Date: \_\_\_\_\_

<sup>a</sup> Any deviations not brought to the attention of the Engineer for review and concurrence shall be the responsibility of the Contractor to correct, if so directed.

<sup>b</sup> Required on all submittals

<sup>c</sup> When required by specifications



OPERATIONS AND MAINTENANCE MANUAL CERTIFICATION FORM

PROJECT: \_\_\_\_\_ CONTRACTOR'S PROJ. NO: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ ENGINEER'S PROJ. NO: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

TRANSMITTAL NUMBER: \_\_\_\_\_ SHOP DRAWING NUMBER: \_\_\_\_\_

SPECIFICATION SECTION OR DRAWING NO: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

MANUFACTURER: \_\_\_\_\_

The above referenced operations and maintenance manual has been reviewed by the undersigned and I/we certify that the manual is customized as needed for this project, is suitable for mounting in a 3-ring binder, and contains the following items:

- |   |   |
|---|---|
| <input type="checkbox"/> Table of Contents                              | <input type="checkbox"/> Project-Related Design Data                        |
| <input type="checkbox"/> Maintenance Schedule and Summary               | <input type="checkbox"/> Wiring Diagrams                                    |
| <input type="checkbox"/> Lubrication Schedule                           | <input type="checkbox"/> Equipment Layout Drawings & Schematics             |
| <input type="checkbox"/> Troubleshooting Information                    | <input type="checkbox"/> Equipment Performance Curves                       |
| <input type="checkbox"/> Warranty Information                           | <input type="checkbox"/> Parts and Service Contact Information <sup>a</sup> |
| <input type="checkbox"/> Startup, Operation, Shutdown Procedures        | <input type="checkbox"/> Manufacturer Contact Information <sup>a</sup>      |
| <input type="checkbox"/> Shop Drawings corrected to As-Built conditions | <input type="checkbox"/> List of part numbers for all components            |
|   | <input type="checkbox"/> List of spare parts supplied and cost              |

By: \_\_\_\_\_  
Contractor<sup>a</sup>

By: \_\_\_\_\_  
Manufacturer<sup>b</sup>

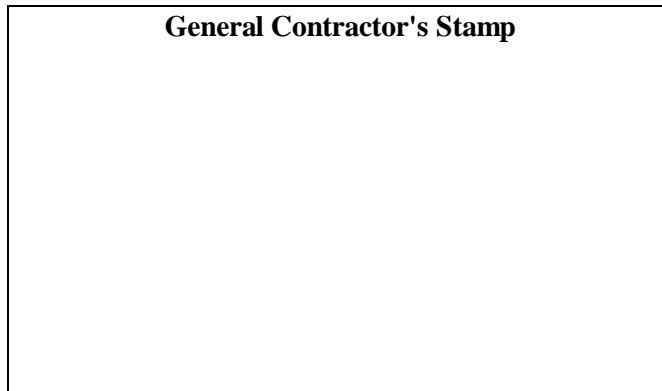
Date: \_\_\_\_\_

Date: \_\_\_\_\_

<sup>a</sup> Contact information shall include name, address and telephone number.

<sup>b</sup> Required on all Operation and Maintenance Manuals.

<sup>c</sup> When required by Specifications.



END OF SECTION