### PROJECT MANUAL

# "OVERLOOK DECK" REPLACEMENT PROJECT FOR CHANDLERS WHARF CONDOMINIUMS

October, 2012

Prepared by:

Pinkham and Greer Consulting Engineers 28 Vannah Avenue Portland, Maine 04103

(207) 781-5242



# CHANDLERS WHARF CONDOMINIUMS GARAGE PAVING PROJECT

#### TABLE OF CONTENTS

Section IB	Invitation to Bid
Section C-200	Instructions to Bidders
Section C-410	Bid Form
Section C-510	Notice of Award Form
Section C-521	Contract Agreement
Section C-550	Notice to Proceed Form
Section C-700	<b>Standard General Conditions</b>
Section SC	Supplementary Conditions

#### **CONSTRUCTION SPECIFICATIONS**

Section 011000	Summary of the Work
Section 024119	Selective Demolition
Section 051200	Structural Steel Framing
Section 061323	Heavy Timber Construction
Section 316223	Concrete Filled Pipe Piles

#### **DRAWINGS**

- S1.1 Overlook Deck Project- Plans and Sections
- S1.2 Overlook Deck Project- Sections and Details

		<del>.</del>

# Invitation to Bid Garage Paving Project

#### 1. Receipt of Bids

Chandlers Wharf Condominium Owners Association will receive bids addressed to or delivered to:

Mr. Shawn Nielsen Dirigo Management Company Chandlers Wharf House Box 184 Commercial St. Portland, ME 04101

until 3:00pm, on November 20, 2012. Bids will be opened privately.

- 2. Construction Performance and Payment Bonds are required. See Instructions to Bidders.
- 3. Project: The work consists of the demolition of the existing overlook deck, saving existing guardrail for re-use; re-driving the existing steel pipe piles (2) to obtain 15 ton capacity, extending pile length as required with new pile material and concrete fill; construction of the new steel framed deck structure and timber decking; re-install existing guardrail; repairs to existing brick pavers as required at interface with new deck; install wheel stops on new deck.

#### 4. Bid Documents

Bid documents have been prepared by:

Pinkham & Greer Consulting Engineers 28 Vannah Avenue Portland, Maine 04103 Phone: (207) 781-5242

Fax: (207) 781-4245

5. Bid documents will be available for examination at the following locations:

Pinkham and Greer, Consulting Engineers 28 Vannah Avenue Portland, Maine 04103

6. The following project schedule is anticipated:

Bid Award:

December 15, 2012

Start Construction:

T.B.D.

Substantial Completion:

May 3, 2013

Final Completion:

May 17, 2013

- 7. The Owner reserves the right to accept or reject any or all bids, to waive any informalities, to negotiate contract terms with the successful bidder, and to disregard all non-conforming, non-responsive or conditional bids.
- 8. A mandatory pre-bid conference will be held at the Chandlers Wharf Condominiums site, 184 Commercial St., Portland, ME on Tuesday November 13, 2012 at 3 PM.

# INSTRUCTIONS TO BIDDERS OVERLOOK DECK REPLACEMENT PROJECT

#### **ARTICLE 1 - DEFINED TERMS**

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
  - A. Issuing Office--The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.
  - B. Owner: Chandlers Wharf Condominium Association

#### ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement or Invitation to Bid may be obtained from the Issuing Office. The deposit will be refunded to each document holder of record who returns a complete set of Bidding Documents in good condition within 30 days after opening of Bids.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

#### **ARTICLE 3 - QUALIFICATIONS OF BIDDERS**

3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be requested.

#### ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

#### 4.01 Subsurface and Physical Conditions

- A. The Supplementary Conditions identify those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
- B. Copies of drawings referenced in Paragraph 4.01.A will be made available by Owner for viewing by any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings.
  - C. Bidder may obtain copies of these drawings for the cost of reproduction.

#### 4.02 Underground Facilities

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

- 4.03 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in Paragraph 4.06 of the General Conditions.
- 4.04 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.05 Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such other work.
- 4.06 It is the responsibility of each Bidder before submitting a Bid to:
- A. examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;
- B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in Paragraph 4.02 of the General Conditions, and (2) reports and drawings of Hazardous Environmental Conditions at the Site which have been identified in the Supplementary Conditions as provided in Paragraph 4.06 of the General Conditions;
- E. obtain and carefully study (or accept consequences of not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;
- F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
- G. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

4.07 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

#### ARTICLE 5 - PRE-BID CONFERENCE

5.01 A mandatory pre-Bid conference will be held at the 3:00 p.m. local time on November 13, 2012 at the project site, Chandlers Wharf Condominiums, 184 Commercial Street, Portland, ME. Representatives of the Owner and Engineer will be present to discuss the Project. Bidders are required to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

#### ARTICLE 6 - SITE AND OTHER AREAS

6.01 Limited areas at the Site will be available for use by the Contractor. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

#### ARTICLE 7 - INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than three days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer. Addenda will be transmitted by email.

#### ARTICLE 8 - BID SECURITY

NOT APPLICABLE

#### **ARTICLE 9 - CONTRACT TIMES**

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

#### **ARTICLE 10 - LIQUIDATED DAMAGES**

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, "or-equal" materials and equipment approved by Engineer. The materials and equipment described in the Bidding Documents establish a standard of required type, function and quality to be met by any proposed substitute or "or-equal" item. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's decision of approval or disapproval of a proposed item will be final.

#### ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, in which case apparent Successful Bidder shall submit an acceptable substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.
- Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

#### ARTICLE 13 - PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer.
- 13.02 All blanks on the Bid Form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each adjustment unit price item, listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
- A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.
- 13.06 All names shall be typed or printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

- 13.08 The address and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

#### ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

- 14.01 Lump Sum & Unit Price Items
  - A. Bidders shall submit a Bid on a lump sum basis for the Base Bid.
  - B. Bidders shall submit Bid amounts on a Unit Price basis for each item of Work listed in the Bid schedule.
- C. The Unit Price total will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
- D. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
  - E. Comparison of Bids will be based on the total of the Base Bid Lump Sum plus the Unit Price total from 14.01B

#### ARTICLE 15 - SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security.
- 15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project title, the name and address of Bidder, and shall be accompanied by the other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Mr. Shawn Nielsen, Dirigo Management Company, Chandlers Wharf House Box, 184 Commercial Street, Portland, ME 04101.

#### ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
- 16.02 If within 24 hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

#### **ARTICLE 17 - OPENING OF BIDS**

17.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and privately read by the Owner.

#### ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid prior to the end of this period.

#### ARTICLE 19 - EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- 19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

#### ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

20.01 Performance and Payment Bonds are required. See Supplementary Conditions for other requirements.

#### **ARTICLE 21 - SIGNING OF AGREEMENT**

21.01 When Owner gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within 5 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within 5 days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

#### **ARTICLE 22 - SALES AND USE TAXES**

22.01 Owner is exempt from Maine state sales and use taxes on materials to be incorporated in the Work. All these taxes shall be excluded in the Bid.

#### **BID FORM**

#### OVERLOOK DECK REPLACEMENT PROJECT

#### ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Chandlers Wharf Condominium Association 184 Commercial St. Portland, ME 04101

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

#### ARTICLE 2 - BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

#### ARTICLE 3 - BIDDER'S REPRESENTATIONS

Addendum Date

3.01 In submitting this Bid, Bidder represents that:

Addendum No.

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

- C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in SC-4.02.
- E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface and subsurface) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder will submit written evidence of its authority to do business in the state where the Project is located not later than the date of its execution of the Agreement.

#### ARTICLE 4 – FURTHER REPRESENTATIONS

- **4.01** Bidder further represents that:
  - A. this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
  - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
  - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
  - D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

#### ARTICLE 5 - BASIS OF BID

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

#### ARTICLE 6 - TIME OF COMPLETION

6.01	Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
6.02	Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times.
	ARTICLE 7 – ATTACHMENTS TO THIS BID
7.01	The following documents are attached to and made a condition of this Bid:
	A. Required Bid security in the form ofN/A
	ARTICLE 8 – DEFINED TERMS
8.01	The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.
	ARTICLE 9 – BID SUBMITTAL
9.01	This Bid submitted by:
An In	Name (typed or printed):  By:  (Individual's signature)
	Doing business as:
A Par	tnership
	Partnership Name:
	By: (Signature of general partner attach evidence of authority to sign)
	Name (typed or printed):

### A Corporation

Corporation Name:	
State of Incorporation:	
State of Incorporation:	bility):
Ву:	
By: (Signature attach evidence of authority to sign)	
Name (typed or printed):	
Title:	(CORPORATE SEAL)
Attest	
Date of Authorization to do business in Maine is/	
Bidder's Business Address	
Bidder's Email Address	
Phone No Fax No	
SUBMITTED on 20	
State Contractor License No (If applicable)	

## **Notice of Award**

			Dated
Project: Overlook Replacem Project	nent Deck	Owner: Chandlers Wharf Condominium	Owner's Contract No.:
Contract:			Engineer's Project No.: 12312
Bidder:			
Bidder's Address: (send Certified Mail,	Return Receipt R	equested)	
You are notified that yo Bidder and are awarded a C	ur Bid dated Contract for _	for the above Contract has been co	nsidered. You are the Successful
	(Indicate to	otal Work, alternates or sections or Work awarde	ed.)
The Contract Price of you	our Contract	is	
Dollars (\$).			
(Insert appropriate data if U	nit Prices are	used. Change language for Cost-Plus co	ntracts.)
copies of each o	f the propose	ed Contract Documents (except Drawings)	accompany this Notice of Award.
sets of the Draw	ings will be d	elivered separately or otherwise made ava	ilable to you immediately.
You must comply with the Award.	the following	conditions precedent within [15] days of the	ne date you receive this Notice of
1. Deliver to the 0	Owner [	_] fully executed counterparts of the Contra	ct Documents.
2. Other condition	ns precedent	:	
Failure to comply with annul this Notice of Award a	these condit and declare ye	ions within the time specified will entitle Cour Bid security forfeited.	Owner to consider you in default,
Within ten days after counterpart of the Contract I	you comply Documents.	with the above conditions, Owner will r	eturn to you one fully executed
	-	Owner	
	F	By: Authorized Signature	
		, waterized eighted 6	
	-	Title	

Copy to Engineer

	ANTHORNE PROPERTY AND ANTHORNE PROPERTY AND ANTHORNE PROPERTY AND ANTHORNE PROPERTY AND ANTI-
	<del></del>

#### **EJCDC**

#### SUGGESTED FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE) FUNDING AGENCY EDITION

Chandlers Wharf Condominium Owners Association

(Owner)

THIS AGREEMENT is by and between

14.07 of the General Conditions by May 17, 2013.

Liquidated Damages

ready for final payment.

4.03

and(C	Contractor).
Owner and Contractor, in consideration of the mutual covenants set forth herein, agree as follows:	
ARTICLE 1 - WORK	
1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is general described as follows:	ally
The work consists of the demolition of the existing overlook deck, saving existing guardrail for re-use; re-driving the expipe piles (2) to obtain 15 ton capacity, extending pile length as required with new pile material and concrete fill; consthe new steel framed deck structure and timber decking; re-install existing guardrail; repairs to existing brick pavers as interface with new deck; install wheel stops on new deck.	struction of
ARTICLE 2 - THE PROJECT	
2.01 The work described in Article 1 constitutes the entire project.	
ARTICLE 3 - ENGINEER	
3.01 The Project has been designed by Pinkham & Greer Consulting Engineers, 28 Vannah Ave., Portland, ME, was act as Owner's Representative, assume all duties and responsibilities, and have the rights and authority assigned to Fin the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.	Engineer
ARTICLE 4 - CONTRACT TIMES	
4.01 Time of the Essence	
A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment at the Contract Documents are of the essence of the Contract.	as stated in
4.02 Substantial Completion and Final Payment	
A. The Work will be substantially completed by <b>May 3, 2013</b> . The Contract Times commence to run ( <b>TBD</b> ) as p Paragraph 2.03 of the General Conditions. The work will be completed and ready for final payment in accordance with	provided in h Paragraph

A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$200 for each day that expires after the time specified in Paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$200 for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and

#### **ARTICLE 5 - CONTRACT PRICE**

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A.

As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

#### ARTICLE 6 - PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
- A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 Progress Payments; Retainage
- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraphs 6.02.A.1 and 6.02.A.2 below. Payments shall not be made until all signed lien waivers from the GC and Subcontractors are received. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements:
  - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:
    - a. 95 percent of Work completed (with the balance being retainage); and
    - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
  - 2. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions.

#### 6.03 Final Payment

A. Upon receipt of the final Application for Payment accompanied by Engineer's recommendation of payment in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay Contractor as provided in Paragraph 14.07 of the General Conditions the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages.

#### **ARTICLE 7 - INTEREST**

7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum legal rate.

#### ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.
- E. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- F. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

#### **ARTICLE 9 - CONTRACT DOCUMENTS**

#### 9.01 Contents

- A. The Contract Documents consist of the following:
  - 1. This Agreement (pages 1 to 5, inclusive).
  - 2. General Conditions (pages 1 to 41, inclusive).
  - 3. Supplementary Conditions (pages 1 to 2, inclusive).
  - 4. Specifications as listed in the Table of Contents of the Project Manual.
  - 5. Drawings consisting of two (2) sheets with each sheet bearing the following general title: Overlook Deck Replacement Project.
  - 6. Addenda (numbers \_\_\_\_\_ to \_\_\_\_, inclusive).
  - 7. Exhibits to this Agreement (enumerated as follows):
    - a. Notice of Award (pages 1 to 1, inclusive).
    - b. Contractor's Bid (pages 1 to 4, inclusive).

- The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
  - a. Notice to Proceed (pages 1 to 1, inclusive).
  - b. Work Change Directives.
  - c. Change Order(s).
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

#### **ARTICLE 10 - MISCELLANEOUS**

#### 10.01 Terms

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

#### 10.02 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

#### 10.03 Successors and Assigns

A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

#### 10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, Owner and Contractor have signed delivered to Owner, Contractor, and Engineer. All portions of the Owner and Contractor or identified by Engineer on their behalt	I this Agreement in three copies. One counterpart each has been he Contract Documents have been signed, initialed, or identified by f.				
This Agreement will be effective,	(which is the Effective Date of the Agreement). This				
Agreement shall not be effective unless and until Agency's des	signated representative concurs.				
OWNER:	CONTRACTOR:				
Ву:	Ву:				
Title:	Title:				
[CORPORATE SEAL]	[CORPORATE SEAL]				
Attest:	Attest:				
Title:	Title:				
Designated Representatives:	Designated Representatives:				
Name:	Name:				
Title:	Title:				
Address for giving notices:	Address for giving notices:				
Phone: FAX:	Div				
Phone: FAX:	Phone: FAX:				
(If Owner is a corporation, attach evidence of authority to	License No.: (Where applicable)				
sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Owner-Contractor Agreement.)	Agent for service or process:				
	(If Contractor is a corporation or a partnership, attach evidence of authority to sign.				

		a.		
·				
				, one -

## **Notice to Proceed**

	Dated
Project: Overlook Deck Replacement Project Owner: Chandlers Wi	harf Condominiums Owner's Contract No.:
Contract:	Engineer's Project No.: 12312
Contractor:	
Contractor's Address: [send Certified Mail, Return Receipt Requested]	
,	
before that date, you are to start performing your obligations up 4 of the Agreement, the date of Substantial Completion is[(or) the number of days to achieve Substantial Completion if final payment is].	, and the date of readiness for final payment is, and the number of days to achieve readiness for the contract Conditions provides that you and the read other identified additional insureds) certificates of accordance with the Contract Documents.  must:
	Owner Siven by:
	Authorized Signature
	Title
	1 1 U.V.
	Date

Copy to Engineer

			general and
			-

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

#### ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By







PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE

a practice division of the

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

This document has been approved and endorsed by



The Associated General Contractors of America



Construction Specifications Institute

#### Copyright ©2002

National Society of Professional Engineers 1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies 1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers 1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

#### TABLE OF CONTENTS

Page

ARTICL	E 1 - DEFINITIONS AND TERMINOLOGY	
1.01	Defined Terms	
1.02	Terminology	8
	E 2 - PRELIMINARY MATTERS	9
2.01	Delivery of Bonds and Evidence of Insurance	
2.02	Copies of Documents	9
2.03	Commencement of Contract Times; Notice to Proceed	
2.04	Starting the Work	
2.05	Before Starting Construction	
2.06	Preconstruction Conference	
2.07	Initial Acceptance of Schedules	9
	E 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE	
3.01	Intent	
3.02 3.03	Reference Standards	
3.03	Reporting and Resolving Discrepancies	
3.04	Amending and Supplementing Contract Documents	
3.06	Electronic Data	
	Electronic DataE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS	11
	DNMENTAL CONDITIONS; REFERENCE POINTS	11
4.01	Availability of Lands	
4.02	Subsurface and Physical Conditions	
4.03	Differing Subsurface or Physical Conditions	
4.04	Underground Facilities	
4.05	Reference Points	
4.06	Hazardous Environmental Condition at Site	13
ARTICL	.E 5 - BONDS AND INSURANCE	13
5.01	Performance, Payment, and Other Bonds	14
5.02	Licensed Sureties and Insurers	15
5.03	Certificates of Insurance	15
5.04	Contractor's Liability Insurance	15
5.05	Owner's Liability Insurance	
5.06	Property Insurance	16
5.07	Waiver of Rights	17
5.08	Receipt and Application of Insurance Proceeds	17
5.09	Acceptance of Bonds and Insurance; Option to Replace	
5.10	Partial Utilization, Acknowledgment of Property Insurer	18
	E 6 - CONTRACTOR'S RESPONSIBILITIES	
6.01	Supervision and Superintendence	
6.02	Labor; Working Hours	
6.03	Services, Materials, and Equipment	
6.04	Progress Schedule	18
6.05	Substitutes and "Or-Equals"	
6.06	Concerning Subcontractors, Suppliers, and Others	
6.07	Patent Fees and Royalties	
6.08	Permits	
6.09	Laws and Regulations	
6.10 6.11	Taxes	
6.11	Use of Site and Other Areas	
6.12	Record Documents	
6.14	Safety and ProtectionSafety Representative	
6.15	Hazard Communication Programs	

6.16	Emergencies	
6.17	Shop Drawings and Samples	23
6.18	Continuing the Work	24
6.19	Contractor's General Warranty and Guarantee	24
6.20	Indemnification	24
6.21	Delegation of Professional Design Services	25
ARTICLE	E 7 - OTHER WORK AT THE SITE	25
7.01	Related Work at Site	25
7.02	Coordination	26
7.03	Legal Relationships	26
ARTICLE	E 8 - OWNER'S RESPONSIBILITIES	26
8.01	Communications to Contractor	
8.02	Replacement of Engineer	
8.03	Furnish Data	
8.04	Pay When Due	
8.05	Lands and Easements; Reports and Tests	26
8.06	Insurance	26
8.07	Change Orders	
8.08	Inspections, Tests, and Approvals	
8.09	Limitations on Owner's Responsibilities	
8.10	Undisclosed Hazardous Environmental Condition	27
8.11	Evidence of Financial Arrangements	
ARTICLE	9 - ENGINEER'S STATUS DURING CONSTRUCTION	27
9.01	Owner's Representative	
9.02	Visits to Site	
9.03	Project Representative	
9.04	Authorized Variations in Work	27
9.05	Rejecting Defective Work	27
9.06	Shop Drawings, Change Orders and Payments	
9.07	Determinations for Unit Price Work	20 28
9.08	Decisions on Requirements of Contract Documents and Acceptability of Work	∠0
9.09	Limitations on Engineer's Authority and Responsibilities	∠0
	10 - CHANGES IN THE WORK; CLAIMS	20 ንዩ
10.01	Authorized Changes in the Work	
10.02	Unauthorized Changes in the Work	
10.03	Execution of Change Orders	
10.04	Notification to Surety	
10.05	Claims	
	11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK	20
11.01	Cost of the Work	30
11.02	Allowances	
11.03	Unit Price Work	
	12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES	21
12.01	Change of Contract Price	
12.02	Change of Contract Times	
12.03	Delays	
	213 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK	
13.01	Notice of Defects	
13.02	Access to Work	
13.02	Tests and Inspections	22
13.04	Uncovering Work	33
13.05	Owner May Stop the Work	34
13.06	Correction or Paragual of Defeating Work	34
13.00	Correction or Removal of Defective Work	
13.07	Correction Period	34
13.08	Acceptance of Defective Work	35
	Owner May Correct Defective Work	35
14.01	14 - PAYMENTS TO CONTRACTOR AND COMPLETION	
14.01	Schedule of Values	
14.02	Progress Payments	
14.03 14.04	Contractor's Warranty of Title	
14.V4	Substantial Completion	37

14.05	Partial Utilization	38
14.06	Final Inspection	38
14.07	Final Payment	38
14.08	Final Completion Delayed	39
14.09	Final Completion Delayed	39
ARTICLE	15 - SUSPENSION OF WORK AND TERMINATION	39
15.01	Owner May Suspend Work	39
15.02	Owner May Terminate for Cause	39
15.03	Owner May Terminate For Convenience	40
15.04	Contractor May Stop Work or Terminate	40
ARTICLE	16 - DISPUTE RESOLUTION	41
16.01	Methods and Procedures	41
ARTICLE	17 - MISCELLANEOUS	41
17.01	Giving Notice	41
17.02	Computation of Times	41
17.03	Cumulative Remedies	41
17.04	Survival of Obligations	41
17.05	Survival of Obligations	41
17.06	Headings	

#### **GENERAL CONDITIONS**

#### ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

#### 1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. Agreement—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidder--*The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. *Bidding Requirements*—The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

- 9. Change Order--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
- 10. Claim—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents— Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work--See Paragraph 11.01.A for definition.
- 17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*--The individual or entity named as such in the Agreement.

- 20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 21. *General Requirements*—Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. Notice to Proceed--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
  - 30. PCBs--Polychlorinated biphenyls.
- 31. Petroleum.-Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

- 32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. Project Manual--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. Radioactive Material—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 37. Resident Project Representative—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 38. Samples-Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. Shop Drawings.—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 42. Site--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
- 43. Specifications--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

- 44. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 45. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.
- 47. Supplementary Conditions--That part of the Contract Documents which amends or supplements these General Conditions.
- 48. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 49. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 50. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 52. Work Change Directive--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

#### 1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

#### B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the "reasonable," "suitable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

#### C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

#### D. Defective

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. does not conform to the Contract Documents, or
  - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
  - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

#### E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

#### ARTICLE 2 - PRELIMINARY MATTERS

#### 2.01 Delivery of Bonds and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

#### 2.02 Copies of Documents

- A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.
- 2.03 Commencement of Contract Times; Notice to Proceed
- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

#### 2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

#### 2.05 Before Starting Construction

- A. Preliminary Schedules: Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
- 1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
  - 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

#### 2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

#### 2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

# ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

#### 3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

#### 3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws, and Regulations
- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

#### 3.03 Reporting and Resolving Discrepancies

#### A. Reporting Discrepancies

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

#### B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
  - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

- 3.04 Amending and Supplementing Contract Documents
- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

#### 1. A Field Order:

- 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
- 3. Engineer's written interpretation or clarification.

#### 3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:
- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
- 2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

#### 3.06 Electronic Data

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

#### 4.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

- 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
- 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

#### 4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
- 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
- 2. is of such a nature as to require a change in the Contract Documents; or
- 3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents:

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

#### C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
  - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

- c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
- 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 Underground Facilities

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

- 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
- 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
  - a. reviewing and checking all such information and data.
  - b. locating all Underground Facilities shown or indicated in the Contract Documents,
  - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
  - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

#### 4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the directors. partners, employees, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors. employees, agents, consultants. subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

#### ARTICLE 5 - BONDS AND INSURANCE

#### 5.01 Performance, Payment, and Other Bonds

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

#### 5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

#### 5.03 Certificates of Insurance

- A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.
- B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

#### 5.04 Contractor's Liability Insurance

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
  - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
  - b. by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

- 3. include completed operations insurance;
- 4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
- 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.
  - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

#### 5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
- 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief. earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
- 5. allow for partial utilization of the Work by Owner;
  - 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 Waiver of Rights

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors. partners. employees, agents, consultants subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and. in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, employees, partners, agents, consultants subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

- 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
- 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

#### 5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

# SUPPLEMENTARY GENERAL CONDITIONS

	·	

#### **Supplementary Conditions**

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. C-700, 2001 Edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

SC-2.02.A Change the word "ten" to "five".

SC-4.01.A Delete the last two sentences: "Owner will obtain in a timely manner .... Paragraph 10.05".

**SC-4.02.A** Delete sub-paragraph 1 in its entirety. Add the following to sub-paragraph 2: "The drawings used include the original civil, site, architectural, structural, mechanical, and electrical drawings used for the construction of the facility, generally dated October, 1985, with the Title "Chandlers Wharf, Central Wharf, Portland ME", and the original geotechnical report "Proposed Development of Central Wharf" by Haley and Aldrich dated July, 1985. Refer to the General Notes on the Drawings for additional information.

SC-4.05.A Delete paragraph in its entirety, and insert the following: "Contractor shall be responsible for laying out the work."

SC-4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

A. No reports on drawings related to Hazardous Environmental Conditions are known to Owner or Engineer.

B. Not Used.

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.B:

- C. Failure of Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. By requiring such insurance and insurance limits herein, Owner does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

SC-5.04 Add the following new paragraph immediately after Paragraph 5.04.B:

C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

SC-1

Worker's Compensation

State Statutory
Applicable Federal Statutory
Employers General Liability \$1,000,000

Comprehensive or Commercial General Liability				
General Aggregate	\$2,000,000			
Products-Completed Operations Aggregate	\$2,000,000			
Personal/Advertising Injury (per person/organizational)	\$1,000,000			
Each Occurrence (Bodily Injury & Property Damage)	\$1,000,000			
Limit per person medical expense	\$10,000			
Contractual Liability Insurance				
General Aggregate	\$1,000,000			
Each Occurrence (Bodily Injury & Property Damage)	\$1,000,000			
Automobile Liability (Combined single limit)	\$1,000,000			
Excess Liability				
General Aggregate	\$2,000,000			
Each Occurrence				

SC-6.02 Delete the last sentence of Paragraph 6.02B.

**SC-6.10** Add a new paragraph immediately after Paragraph 6.10.A:

- B. Owner is exempt from payment of Maine sales tax on all materials to be incorporated into the Work.
- 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
- 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

SC-9.03 Delete paragraph in its entirety.

SC-11.02 Delete paragraph in its entirety.

# **SPECIFICATIONS**

# SECTION 01 10 00 - SUMMARY OF THE WORK

#### PART 1 - GENERAL

#### 1.01 PROJECT/WORK IDENTIFICATION:

A. General:

Project Name:

**Garage Paving Project** 

Project Number:

12312

Contract

**Documents** 

Prepared By:

Pinkham and Greer, Consulting Engineers

Portland, Maine

Owner:

**Chandlers Wharf Condominium Association** 

Date:

Drawings and Specifications Dated October, 2012

B. <u>Contract Documents</u>: Indicate the work of the Contract and related requirements and conditions that have an impact on the project.

C. <u>Summary by References</u>: Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, addenda and modifications to the contract documents issued subsequent to the initial printing of this project manual, and including, but not necessarily limited to, printed material referenced by any of these. It is recognized that work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon, including weather conditions, and other forces outside the contract documents.

# 1.02 BASE BID, ALTERNATES, AND UNIT COST ITEMS:

<u>Base Bid</u>: All the work of the contract except work included in Unit Cost Items. This includes the demolition of the existing overlook deck, saving existing guardrail for reuse; re-driving the existing steel pipe piles (2) to obtain 15 ton capacity, welded splice for new pipe pile; construction of the new steel framed deck structure and timber decking; re-installing existing guardrail; repairs to existing brick pavers as required at interface with new deck; installing wheel stops on the new deck.

<u>Unit Cost Item 1</u>: Steel Pipe Piles, concrete filled: extending pile length as required with new pile material and concrete fill (welded splice shall be included in Base Bid).

Measurement: Actual number of linear feet of extended pile.

#### 1.03 CONTRACTOR'S USE OF PREMISES:

- A. <u>General</u>: Before beginning work, secure approval from the Owner for the following:
  - 1. Areas permitted for personnel parking.
  - 2. Access to the site.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for unloading demolition and new materials to and from the garage area and plaza adjacent to the overlook deck work area.
- A. <u>Partial Owner Occupancy</u>: Owner will occupy the premises during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage of the sections of the plaza deck not in the Overlook Deck construction area. Perform the Work so as not to interfere with Owner's operations. Maintain existing entrances and exits, unless otherwise indicated.
- B. <u>Utilities to Remain in Service</u>: All utilities must remain in service throughout the project. Coordinate performance of work which may interrupt these facilities with the Owner. Notify Owner of damage immediately and repair damage immediately.
- C. <u>The Owner has concern</u> with respect to the health and safety of the building occupants during the work. Meet with the Owner and building manager to discuss health and safety issues, work sequencing, and scheduling. Construct, maintain, and remove necessary temporary barricades to prevent vehicles and building occupants from entering the work areas.

# E. <u>Building Site:</u>

- 1. Use reasonable care and responsibility to protect the building and site against damages. The Contractor shall be responsible for the correction of any damage incurred as a result of the performance of the Contract.
- 2. Remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the building.

# 1.04 COORDINATION:

A. <u>General</u>: The work of this Contract includes coordination of the entire work of the project with the Owner's property management staff and coordinating among various subcontractors and suppliers.

#### 1.05 SUBMITTAL PROCEDURES:

- A. Submittal form: Identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.
- E. Submit 4 copies of product data and shop drawings. Two copies will be returned.

#### 1.06 MEETINGS:

- A. Meet with Owner representatives on a weekly basis to review job progress.
- B. Schedule pre-construction meetings as required in Specification sections.

#### 1.07 MISCELLANEOUS PROVISIONS:

A. none

#### 1.08 SCHEDULE OF VALUES:

- A. Within 10 days of award of contract, submit a schedule of values to the Owner with the following breakdown of the Contract cost:
  - General Conditions
  - Excavation Work
  - Paving Work

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

\* END OF SECTION 01 10 00 \*

#### **SECTION 024119 - SELECTIVE DEMOLITION**

#### PART 1 - GENERAL:

#### 1.01 DESCRIPTION OF WORK:

- A. Extent of selective demolition work is indicated on drawings.
- B. <u>Selective Demolition Work</u>: Selective removal and subsequent offsite disposal (unless noted for salvage and re-installation) of the following:
  - Existing handrail assembly- carefully remove, store on-site for re-installation
  - Existing 2x6 wood decking.
  - Existing wood structural framing.
  - Existing CMU wall, steel clip angles, steel ledger angle

#### 1.02 JOB CONDITIONS:

- A. Occupancy: The buildings immediately adjacent to areas of selective demolition will be continuously occupied. Conduct selective demolition work in manner that will minimize need for disruption of normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities which will severely impact normal operations.
- B. <u>Condition of Structures</u>: Owner assumes no responsibility for actual condition of items or structures to be demolished.
  - Conditions existing at time of commencement of contract will be maintained by Owner insofar as practicable.
- C. <u>Partial Demolition and Removal</u>: If permitted by Owner, items indicated to be removed but of salvable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed. Some items may remain property of Owner. Coordinate with Owner before removing any items from site.
  - Storage or sale of removed items on site will not be permitted.
- D. <u>Protections</u>: Provide temporary barricades and other forms of protection as required to protect building occupants and general public from injury due to selective demolition work.
  - Provide protective measures as required to provide free and safe passage of building occupants and general public on the plaza to and from buildings.

Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.

Protect existing steel pipe piles from damage due to demolition operations as they will be retained and reused for the new deck construction.

Protect adjacent plaza deck brick paver surfaces to remain from damage due to demolition operations as new decking will get tied into the existing paver surfaces.

- E. <u>Damages</u>: Promptly repair damages caused to adjacent facilities by demolition work at no cost to Owner.
- F. <u>Traffic</u>: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- G. <u>Mechanical, Electrical and Utility Services</u>: Maintain services to remain, keep in service using temporary by-pass connections as necessary until permanent systems have been constructed, and protect against damage during demolition operations.

Do not interrupt existing utilities serving occupied or used facilities, except when authorized by Owner. Provide temporary services during interruptions to existing services as acceptable to Owner.

# PART 2 - PRODUCTS (NOT APPLICABLE).

# PART 3 - EXECUTION

#### 3.01 INSPECTION:

A. <u>Prior to commencement of selective demolition work</u>, inspect areas in which work will be performed. Photograph existing conditions of structure surfaces, equipment or surrounding properties which could be misconstrued as damage resulting from selective demolition work; file with Owner's Representative prior to starting work.

#### 3.02 PREPARATION:

A. <u>Provide shoring</u>, bracing, or support to prevent movement, settlement or collapse of structures to be demolished and adjacent facilities to remain. Provide bracing for existing pipe piles which will remain.

Cease operations and notify the Owner's Representative immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.

B. <u>Locate, identify, stub off and disconnect</u> utility services that are not indicated to remain. Mark locations on project record documents.

#### 3.03 DEMOLITION:

- A. <u>Perform selective demolition work</u> in a systematic manner. Use such methods as required to complete work indicated on Drawings.
- B. <u>If unanticipated</u> mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Notify Engineer and Owner.

#### 3.04 DISPOSAL OF DEMOLISHED MATERIALS:

- A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site as required on the drawings.
- B. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.
- C. Burning of removed materials is not permitted on project site.

# 3.05 CLEAN-UP AND REPAIR:

- A. Upon completion of demolition work, remove tools, equipment and demolished materials from site and leave interior areas broom clean.
- B. Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

\* END OF SECTION 024119 \*

		parties -

#### **SECTION 051200 - STRUCTURAL STEEL**

PART 1 - GENERAL

- 1.01 SUMMARY:
- A. Section includes: Structural steel as defined in AISC "Code of Standard Practice".
- B. Related work: Hot-Dipped Galvanized Coating
- 1.02 QUALITY ASSURANCE:
- A. Comply with the following, latest edition, except as otherwise indicated.
  - AISC "Code of Standard Practice for Steel Buildings and Bridges".
  - AISC "Allowable Stress Design Specification for Structural Steel Buildings".
  - AISC "Specifications for Structural Joints using ASTM A 325 or A 490 Bolts" approved by the Research Council on Structural Connections (RCSC).
  - AWS D1.1 "Structural Welding Code".
- B. Fabricator Qualifications: Meet one of the following requirements.
  - AISC or SSFNE member with 10 years experience in fabrication of building types listed in AISC Category I.
  - 2. AISC Certified for Category I Buildings.

If the above requirements cannot be met, the fabricator shall retain an American Welding Society Certified Welding Inspector and submit weld procedures prepared in accordance with the American Welding Society D1.1 Structural Welding Code. The welding procedures shall be reviewed and stamped by the CWI for conformance to AWS D1.1.

The CWI shall insure compliance with the welding procedures in the shop and inspect a minimum of 50% of shop welds. If 10% of the inspected welds are unacceptable during initial inspection, 100% of welds shall be inspected. Submit a report signed by the CWI showing the results of the inspections.

The Owner's independent testing agency may inspect and/or test welding and other fabrication procedures at the plant prior to shipping, however, Engineer may, at any time before final acceptance, reject material not complying with specified requirements.

- C. Installer Qualifications: Firm designated as an AISC Certified Erector; or a firm that specializes in or whose primary business is structural steel erection, with a minimum of 10 years experience on similar sized projects.
- D. Qualifications for Welding Work: Qualify welding procedures and welding operators in accordance with AWS "Standard Qualification Procedure".
  - Provide proof that welders to be employed in work have satisfactorily passed AWS qualification tests and that qualifications are current.
- E. Provide setting drawings, templates, and directions for installation of anchor rods and other anchorages to be installed by others.
- F. Shop drawing review by Engineer will be for structural adequacy only. Dimensions and elevations may or may not be reviewed in whole or in part. The fabricator is entirely responsible for accuracy of detailed dimensions on the shop drawings and for fit up in the field.
- G. Galvanizer Qualifications: minimum of ten years experience in successful application of galvanized coatings.
- H. Galvanizer and Fabricator coordination: fabricator shall submit shop drawings to galvanizer for review for suitability of materials for galvanizing and coordinate any required modifications to fabrications or surface preparations to be prepared by fabricator.

#### 1.03 SUBMITTALS:

- A. Product Data: Manufacturer's data and installation instructions for shrinkageresistance grout, chemical grout, and hot dipped galvanizing product literature, product type, and performance criteria.
- B. Shop Drawings: Fabrication and erection drawings including complete details of all members and connections, including all field connections. Distinguish between shop and field welding and bolting. Identify fully tightened and slip-critical connections if any.
- C. Welder Qualifications: Proof that all shop and field welders currently meet AWS qualification requirements.
- D. Welding Procedures: Written welding procedures for ALL field welding PRIOR to the start of any field welding.

E. Fully-Tightened High Strength Bolting Installation Procedure: Written installation procedure for installation of fully-tightened high strength bolts. Indicate method of tightening, surface preparation, storage and handling procedure, calibration and testing procedure and quality control measures.

#### 1.04 DELIVERY, STORAGE AND HANDLING:

- A. Deliver anchor rods and anchorage devices, which are to be embedded in cast-inplace concrete or masonry, in ample time to not delay work.
- B. Store materials to permit easy access for inspection and identification. Keep steel members off ground. Protect steel members and packaged materials from deterioration.

Do not store materials on structure in a manner that might cause distortion or damage to members or supporting structures. Repair or replace damaged materials or structures as directed.

Clean and relubricate bolts and nuts that become dry or rusty before use.

#### PART 2 - PRODUCTS

#### 2.01 MATERIALS:

- A. Metal Surfaces, General: For fabrication of work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, rolled trade names and roughness. Remove such blemishes by grinding, or by welding and grinding, prior to cleaning, treating and application of galvanized surface finishes.
- B. W-shapes: ASTM A 992.
- C. Other Shapes, Plates, and Bars: ASTM A36.
- D. Anchor Rods: ASTM A 36.
- E. High-Strength Bolts: ASTM A 325, Type 1, hot dip galvanized. Heavy Hex Nuts: ASTM A 563, hot dip galvanized. Hardened Washers: ASTM F 436, hot dip galvanized.
- F. Tension Control Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, round head steel structural bolts with splined ends, heavy hex nuts ASTM A 563, hardened washers ASTM F 436, all hot dip galvanized.

- G. Electrodes for Welding: Comply with AWS Code.
- K. Shrinkage-Resistant ("Non-Shrink") Grout: ASTM C 1107, pre-mixed, non-metallic, non-corrosive, non-staining.

#### 2.02 FABRICATION:

A. Shop Fabrication and Assembly: Shop fabricate and assemble to greatest extent possible in accordance with AISC Specifications, AISC Code of Standard Practice, and as indicated on final shop drawings. Provide camber in structural members where indicated.

Mark and match-mark materials for field assembly. Fabricate for delivery sequence which will expedite erection and minimize field handling of materials.

#### B. Connections:

- 1. Weld or bolt shop connections.
- 2. Bolt field connections except where field welded connections are shown on the Drawings.
- 3. Bolted Connections: Comply with AISC "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts".
- Welded Connections: Comply with AWS D1.1 for procedures, tolerances, appearance, and quality of welds and for methods used in correcting welding work.
- C. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible. Plane thermally cut edges to be welded to greatest extent possible.
- D. Bolt Holes: Drill or punch standard holes perpendicular to steel surfaces. Drill or punch and cut or thermally cut slotted holes perpendicular to steel surfaces.
- E. Holes in Bearing Plates: Cut, drill, punch, or mechanically thermal cut holes perpendicular to steel surfaces.
- F. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- G. Other Holes: Provide holes required for securing other work to structural steel framing, and for passage of other work through steel framing members.

Provide threaded nuts welded to framing, and other specialty items as indicated to receive other work.

Cut, drill, punch, or mechanically thermally cut holes perpendicular to steel surfaces. Do not enlarge holes by burning.

#### 2.03 STEEL COATING:

- A. Structural Steel Coating: Hot-Dip Galvanizing: For all steel exposed to the elements, provide coating for iron and steel fabrications applied by the hot-dip process.
  - 1. Basis-of-Design: Duragalv by Duncan Galvanizing.
  - 2. Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware.
  - 3. Provide thickness of galvanizing specified in referenced standards.
  - 4. Prior to galvanizing, steel shall be immersed in a pre-flux solution (zinc ammonium chloride), 12 to 14 Baume, and contain less than 0.4% iron.
  - 5. Galvanizing bath shall contain special high grade zinc and other earthly materials.
  - 6. Fill vent holes after galvanizing, if applicable, and grind smooth.
- B. Do not paint surfaces which are to be field welded, connected with slip-critical joints, or which are to receive spray-on fireproofing.
- C. Surface Preparation: Clean in accordance with Steel Structures Painting Council as follows, and as required by the hot dipped galvanizer:
  - SP-1 Solvent Cleaning: Oil and grease removal.

SP-2 Hand Tool Cleaning or SP-3 Power Tool Cleaning: For steel to be enclosed or protected.

#### PART 3 - EXECUTION

#### 3.01 ERECTION:

A. Check elevations of concrete and masonry bearing surfaces, and locations of anchor rods and similar devices before erection work proceeds. Report discrepancies to Engineer. Do not proceed with erection until corrections have been made, or until compensating adjustments to work have been agreed upon with Engineer.

Use nylon slings or padded cables for handling galvanized material.

B. Provide temporary shoring, guys, braces, and other supports during erection as required to keep structural steel, secure, stable, plumb, and in alignment. Remove temporary supports when permanent steel members, connections, diaphragms, bracing and other structural elements are in place.

Structural stability and safety during construction are the sole responsibility of the Contractor and Erector.

C. Anchor Rods: Furnish anchor rods and other connectors required for securing structural steel to foundations and other in-place work.

Furnish templates and other devices as necessary for presetting rods and other anchors to accurate locations.

D. Setting Bases and Bearing Plates: Clean concrete and masonry bearing surfaces of bond-reducing materials and roughen to improve bond to surfaces. Clean bottom surface of base and bearing plates.

Set base plates and bearing plates for structural members on wedges, nuts, shims, or other adjusting devices, or set loose leveling plates in grout. Set leveling plates so that additional shimming or adjustment is not required to plumb supported members.

- E. Tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims, but if protruding, cut off flush with edge of base or bearing plate prior to packing with grout.
- F. Pack grout solidly between bearing surfaces and base or bearing plates so no voids remain. Neatly finish exposed surfaces, protect and cure grout.
  - Comply with manufacturer's instructions for installation and curing.
- G. Set structural frames accurately to lines and elevations indicated. Align and adjust various members forming part of complete frame or structure before permanently fastening. Clean bearing surfaces and other surfaces, which will be in permanent contact before assembly. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
- H. Level and plumb individual members of structure within specified AISC tolerances.
  - Splice members only where indicated and accepted on shop drawings.
- I. Maintain erection tolerances within AISC "Code of Standard Practice for Steel Buildings and Bridges".

J. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

Do not use thermal cutting during erection unless approved by Engineer. Finish thermally cut sections to within smoothness limits in AWS D1.1.

#### 3.02 FIELD CONNECTIONS:

- A. Bolted Connections: Install bolts according to AISC "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint indicated. Joints are snug tight unless indicated otherwise on the Drawings.
- B. Welded Connections: Comply with AWS D1.1 for welding procedures, surface preparation, tolerances, quality of welds, and for methods used to correct welding work.

Remove slag from all welds, perform visual inspection of all welds, correct deficiencies, and apply zinc-rich touch up paint to all galvanized surfaces.

#### 3.03 QUALITY CONTROL:

A. Owner will engage an independent testing and inspection agency to inspect highstrength bolted connections and field welded connections and to perform tests and prepare test reports.

Testing agency shall conduct and interpret tests and state in each report whether or not work complies with requirements, and specifically state any deficiencies.

Provide access for testing agency to places where structural steel work is being conducted so that required inspection and testing can be accomplished.

- B. Bolted Connections: Bolted connections will be tested and inspected according to RCSC's Specification for Structural Joints Using ASTM A 325 or A 490 Bolts.
- C. Welded Connections: Field welds will be visually inspected according to AWS D1.1
  - In addition to visual inspection, field welds will be tested according to AWS D1.1 and the following inspection procedures, at testing agency's option:
    - a. Liquid Penetrant Inspection: ASTM E 165.
    - Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.

- c. Ultrasonic Inspection: ASTM E 164.
- d. Radiographic Inspection: ASTM E 94.
- D. Owner may require testing of up to 20% of all field welds and up to 100% of all full penetration field welds using methods stated above. If 20% of these tests show deficiencies, Engineer may require additional tests at no cost to the Owner.
- E. Correct deficiencies in structural steel work which inspections and laboratory test reports have indicated to be not in compliance with requirements. Perform additional tests, at Contractor's expense, as necessary to reconfirm any noncompliance of original work, and as necessary to show compliance of corrected work.

#### 3.04 REPAIRS AND PROTECTION:

A. After installation, promptly clean, prepare, and prime rust spots, and abraded surfaces of galvanized structural steel. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning. Repair damaged galvanized coatings with galvanized repair paint complying with the requirements of ASTM A-780, modified to 95 percent zinc in dry film. Galvanizing repair paint shall have 95 percent zinc by weight, ZiRP by Duncan Galvanizing. Thickness of applied galvanizing repair paint shall not be less than coating thickness required by ASTM A123 or ASTM A153 as applicable. Touch up of galvanized surfaces with silver paint, brite paint, or aluminum paint is not acceptable.

\* END OF SECTION 051200 \*

# **SECTION 06 13 23 - HEAVY TIMBER CONSTRUCTION**

#### PART 1 - GENERAL:

#### 1.01 SUMMARY:

A. Work includes the following structural wood framing:

Nailers.

Solid wood decking.

#### 1.02 SUBMITTALS:

A. Product data and installation instructions for required work, covering timber and lumber, fabrication process, treatments and accessories.

Submit certification by treating plant that required treatments comply with specified standards.

#### 1.03 QUALITY ASSURANCE:

- A. <u>Standards</u>: American Institute for Timber Construction "Standards for Heavy Timber Construction" AITC 108.
- B. <u>Grading of Timber</u>: Provide timber graded by a recognized agency, complying with requirements of American Lumber Standards Committee and PS 20 "American Softwood Lumber Standard".
- C. Use only pieces which bear inspection service's grade mark.

#### PART 2 - PRODUCTS

# 2.01 TIMBER FRAMING:

A. <u>Timber Nailer Members:</u>

Species and Grade:

Southern Pine No. 2 or better.

Grading Agency:

Southern Pine Inspection Bureau.

B. <u>Moisture Content</u>: Maximum moisture content 19 percent. Include "S-DRY" or similar indication in grade marking.

C. <u>Dressing</u>: Dressed on 4 sides (S4S) at mill, prior to grading.

#### 2.02 SOLID WOOD DECKING:

A. <u>Decking Members</u>:

Species and Grade:

Southern Pine No. 1 or better.

Grading Agency:

Southern Pine Inspection Bureau.

B. <u>Moisture Content</u>: 19 percent moisture content (air or kiln dried). Include "S-DRY" or similar indication in grade marking.

C. Dressing: Dressed on wide faces to ensure smooth deck surface.

#### 2.03 CONNECTORS, FASTENERS AND MISCELLANEOUS ITEMS:

- A. <u>Provide</u> fabricated structural steel (ASTM A36) shapes, plates and bars, welded into assemblies of types and sizes indicated, with steel bolts (ASTM A307), lag bolts, and other fasteners as required.
- B. <u>Finish</u>: Hot-dip Galvanized:

Shapes and fabrications: ASTM A123, min. 2.0 oz/s.f., 3.4 mils minimum thickness.

Hardware: ASTM A153.

C. Other Fasteners: Hot dip galvanized.

#### 2.04 FABRICATION, TIMBER NAILERS:

- A. Field fabricate timber nailers.
- B. <u>Fabricate</u> members by cutting and restoring exposed surfaces to match specified surfacing. Predrill for all threaded fasteners, drifting, and assembly of units.
- C. <u>End-Cut Sealing</u>: Immediately after end-cutting each member to final length, and after wood treatment (if any), apply a saturation coat of end sealer to ends and other cross-cut surfaces, keeping surfaces "floor-coated" for not less than 10 minutes.

# 2.05 FABRICATION, WOOD DECKING:

- A. Predrill for all fasteners.
- B. <u>End-Cut Sealing</u>: Immediately after end-cutting each decking member to final length, and after wood treatment (if any), apply a saturation coat of end sealer to ends and other cross-cut surfaces, keeping surfaces "floor-coated" for not less than 10 minutes.
- C. <u>Install decking</u> with heartwood side against stringers.

# 2.06 PRESSURE TREATMENT:

A. <u>Pressure treat all members</u> with chromated copper arsenate (CCA) according to the AWPA Standards and retentions listed below. Kiln dry all members to 19% maximum moisture content after treatment.

Blocking framing: AWPA standards C2-91 and C18-90 to a retention of 2.5 pcf.

Deck Boards: AWPA Standards C2-91 and C18-90 to a retention of 1.0 pcf.

# PART 3 - EXECUTION

#### 3.01 INSTALLATION:

- A. <u>General</u>: Erect blocking and decking true to the supporting structure.
- B. Install miscellaneous steel connectors, anchors, and accessories as indicated.
- C. <u>Cutting</u>: Avoid extra cutting. Where treated members must be cut during erection, apply a heavy brush coat of the same treatment, complying with AWPA Standard M4.
- D. Repair damaged surfaces and finishes after completion of erection, or replace damaged members as directed where damage is beyond satisfactory repair.

\* END OF SECTION 06 13 23 \*

# **SECTION 31 62 23 – CONCRETE FILLED PIPE PILES**

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION OF WORK:

A. Steel pipe pile material, concrete fill, and welded splices to the existing piles, all as required by specialty pile contractor. Two (2) existing steel pipe piles will be redriven to specified capacity, and additional steel pipe pile material and concrete fill will be added as required to obtain top of pile at required elevation; embedded steel anchorage plates will be set in concrete fill at top of pile.

#### 1.02 DELIVERY, STORAGE, AND HANDLING:

- A. Materials ordered or delivered to project site prior to verification of assumed pile length, will be at Contractor's risk.
- B. Deliver materials to project site in quantities and at times to assure continuity of pile driving operations.

### 1.03 JOB CONDITIONS:

- A. <u>Site Information</u>: Available data on indicated subsurface conditions is not intended as representations or warranties of continuity of such conditions. It is expressly understood that Owner will not be responsible for interpretations or conclusions drawn therefrom by Contractor. The data may be made available solely for the convenience of Contractor. Test borings and other exploratory operations may be made by Contractor at no additional cost to Owner.
- B. <u>Protection</u>: Protect structures, underground utilities and other construction from damage caused by pile driving operations.
- C. <u>Access</u>: Owner will make access available by water for barge and tug with pile driving equipment by temporary relocation of marina floating docks as required. <u>Pile contractor shall provide notice in their Bid if they can provide the Work for temporary relocation of the floating docks for consideration by the Owner.</u>

#### 1.04 SUBMITTALS:

- A. Submit material data for steel pipe piles and concrete fill materials.
- B. Submit project record documents with an accurate record of the following: length of pile added to the existing piles, driving sequence, number of blows per foot and measured set for last 10 blows, driving force of each hammer blow, type and size of equipment.

#### 1.05 CONTRACTOR DUTIES:

- A. <u>Pre-Installation Meeting</u>: minimum one week prior to pile driving operations, convene a meeting with representatives of the Owner, Engineer, General Contractor, and Pile Contractor. Project requirements and driving procedures will be reviewed.
- B. Performance Requirements: Drive existing piles to required pile capacity of 15 tons.

#### PART 2 - PRODUCTS

### 2.01 STEEL PIPE PILES:

- A. ASTM A 252- Standard Specification for Welded and Seamless Pipe Piles, Grade 1 (min. 45 ksi).
- B. <u>Concrete Fill</u>: minimum 28-day compressive strength of 3000 psi.

#### PART 3 - EXECUTION

#### 3.01 DRIVING EQUIPMENT:

- A. Piles shall be driven using pile driving equipment of type generally used in standard pile driving practice, operated at manufacturer's specified rate, to develop required energy per blow.
- B. Use hammer of sufficient size, capacity and type to deliver effective, consistent dynamic energy, suitable for piles to be driven, operating at not more than 75 percent efficiency of rated driving energy.
- C. Leads shall be fixed or rigid type that will hold pile firmly in position during driving and in alignment with hammer.

## 3.02 DRIVING PILES:

- A. <u>General</u>: Notify building occupants with 48 hours notice before proceeding with the Work.
- B. <u>Driving Criteria</u>: Continuously drive piles at locations indicated, to required blow count to develop specified load capacity.
- C. <u>Damaged or Misdriven Piles</u>: Damaged piles, and piles driven outside required driving tolerances will not be accepted and must be replaced with new piles.

- Piles rejected after driving may be withdrawn or abandoned and cut-off at mud line, and additional piles driven to replace rejected units at designated locations.
- D. <u>Extending and Cutting-Off</u>: Extend pipe piles by welded splices of new pipe pile material as shown on the Drawings. Cut-off tops of extended piles at elevations indicated on the Drawings. Dispose of excess materials off site.
- E. <u>Concrete Fill</u>: Fill pipe pile with concrete fill up to elevations indicated on the Drawings, and install embedded steel plate anchorage for new steel framing.

### 3.03 MEASUREMENT FOR PAYMENT:

- A. <u>Basis for Bids</u>: Base Bids shall be based on mobilization and re-driving two (2) existing concrete filled steel pipe piles to required capacity and welded splice for additional pile material.
- B. <u>Basis for Unit Cost Payment</u>: From driving records, calculate actual total extended length of piles. Unit Cost price per linear foot includes labor and materials, tools, equipment, and incidentals for performing Work for furnishing steel pipe, cutting-off, concrete filling of piles, installation of embedded plate (provided by Others) and disposal of cut-offs and other pile and fill materials.

No payment will be made for rejected piles, including piles driven out of place, or piles damaged in driving or handling.

\*\*END OF SECTION 31 62 23\*\*

