

SPECIFICATIONS

DIVISION I - GENERAL REQUIREMENTS

This Work is being performed under one (1) contract as outlined in the Invitation to Bidders and in the General Requirements. It shall be expressly understood that the Contractors shall be thoroughly familiar with the General Requirements and work that pertains to these Contracts. It is further expressly understood that all bidders shall have visited the site and made themselves thoroughly familiar with the conditions of work, and the coordination required to complete the contract as shown on the drawings and specifications.

SECTION 01011 - SUMMARY OF THE WORK

PART I – GENERAL

I.01 RELATED DOCUMENTS:

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

I.02 PROJECT/WORK IDENTIFICATION

- A. General: Project name is the **For the Expansion of Trails at Irene Sheldon Memorial Park, Killingworth, CT** as shown on Contract Documents prepared by Glenn A. Johnson, P.E. Drawings and Specifications dated September 25, 2016, Contract Drawings prepared by Nemergut Consulting dated, September 25, 2016.
- B. Contractor: The work shall be bid as one contract: General Construction of Proposed Improvements to Irene Sheldon Park.
- C. Contract documents: indicate the work of the Contractor and related requirements and conditions that have an impact on the project. Related requirements conditions that are indicated on the Contract Documents include, but are not necessarily limited to, the following:
 - Existing site conditions and restrictions on use of the site.
 - I. Coordination of work under this contract with the on-going work consisting of the park maintenance under a different contract.
- D. It shall be the responsibility of each bidder to visit and thoroughly investigate the site so as to familiarize himself/herself with the conditions under which the work is to be carried out. Bid by Bidder shall be deemed to have taken into consideration all existing conditions and coordination of general park maintenance work being performed under a different contract concerning the redevelopment of the park. No consideration will be given to any claim submitted by a Contractor due to his failure to familiarize himself with conditions under which the work is to be executed.
- E. Every bidder will receive complete sets of Contract Documents. Each Contractor shall be responsible for familiarizing himself with the work and shall consider such work and the coordination required in completing the entire work of the project.

I.03 SUMMARY, PRIME CONTRACT WORK

Briefly, the work of the contractor, as defined in greater detail by other provisions of the Contract Documents, can be summarized as follows:

- A. General Construction includes work that is primarily civil in nature plus work traditionally recognized as general construction. It includes both administration and coordination responsibilities. Work under this contract includes, but is not necessarily limited to, the following:
 - Establishment of Sedimentation and Erosion Control Measures
 - Site Preparation and Maintenance
 - Site Grading and creation of Trail surfaces
 - Site Restoration

I.04 PRIME CONTRACTORS USE OF PREMISES

A. General: During the entire construction period, the Contractor shall have use of the premises for construction operations however any of activities regarding work under this contract will have to be coordinated with the general field maintenance contractor who will be working at the site.

B. Use of the Site: Confine operation at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.

Keep existing driveways and entrances serving the premises clear and available to the public at all times. Do not use these areas for parking or storage of materials.

Do not unreasonable encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to areas indicated. If additional storage is necessary, obtain and pay for such storage off-site.

Lock automotive type vehicles such as passenger cars and trucks and other types of mechanized and motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.

I.05 DIVISION OF WORK:

A. The Contract for General Construction will include all work called for on Sheets IP-1 and IP-2 of the Drawings, Division One through 28810 and Technical Section of the Specifications.

END OF SECTION 01010

SECTION 01013 – MISCELLANEOUS PROVISIONS

PART I – GENERAL

I.01 RELATED DOCUMENTS:

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

I.02 MISCELLANEOUS PROVISIONS:

- A. The following Miscellaneous Provisions apply to this project.

I.03 ORAL INSTRUCTIONS

- A. Neither Owner, nor his representative, nor Engineer shall be responsible in any way to oral answers, unconfirmed in writing, to any inquiries regarding intent or meaning of the drawings, details, schedules, or specifications, for any oral instruction by themselves or their employees. Each Contractor shall execute oral orders, but shall obtain confirmation in writing of all except those evidently trivial, or those direction executions of contract as written.

I.04 PROJECT REPRESENTATIVE:

- A. Notice is hereby given that a part time project representative (Clerk of the Work) will be employed by the Owner throughout the period of construction. The duties and responsibilities of this part time representative shall be set forth in AIA Document B352.

I.05 JOB SITE ADMINISTRATION:

- A. The Engineer shall be responsible for the administration of the work. Each Contractor shall have and maintain on the job a component superintendent thoroughly familiar with all aspects of the work.

I.06 TIME FOR COMPLETION:

- A. The time allotted for Substantial Completion of the work as described under Article 15 of the General Conditions is 45 calendar days from the date of signing of Owner-Contractor Agreement.

I.07 LIQUIDATED DAMAGES:

- A. In case the Contractor should fail to substantially complete the work within the time fixed for substantial completion of this contract, the Contractor must pay to the Town of Killingworth the sum of \$250.00 for each and every calendar day that the time consumed in completing the work exceeds the time allowed therefore. This said sum in view of the difficulty of accurately ascertaining the loss which the Town will suffer by reason of delay in the completion of the work hereunder is hereby fixed and agreed as the liquidated damages that the Town will suffer by reason of such delay and not as a penalty.

I.08 OWNER-CONTRACTOR AGREEMENT:

- A. If, and when, the Owner decides to enter into a contract with a successful Bidder (Contractor) the form used for such contract shall be the agreement that is incorporated in the legal section of these specifications

I.09 WORK IN COLD WEATHER:

- A. No work with material containing water shall be carried out during unreasonable cold weather.
- B. Such work may be started when temperature is 25 degrees F. and rising and shall be stopped when temperature is 32 degrees F. and falling.
- C. All work being installed or previously installed shall be protected against cold weather or frost by means of hay, straw, canvas, approved heating units, or other approved methods. Work damaged by cold weather or frost will not be acceptable. It shall be the Contractor's responsibility to correct all work damaged by cold weather or frost.
- D. Where requirements for work in cold weather are set forth in individual Section of these Specifications covering specific items (such as Earthwork, Cast-in-place concrete, site improvements work, ect.) the provisions of these Sections shall be adhered to.

I.10 PROTECTION HELMETS (HARD HATS):

- A. "In accordance with OSHA regulations, Contractor's employees shall be required to wear protective helmets (hard hats) when there is possible danger of head injury from impact, from falling or flying objects, from electrical shock and burns, or as directed by the Engineer. Additionally, all employees working within an active highway right-of-way must wear protective helmets at all times. Helmets are not required for employees within a completely enclosed cab constructed of steel frame and glass, or inside an automobile. Helmets must meet current OSHA standards for impact, electrical shock and burn protection. Contractor's employees will be considered to include everyone on the Contractor's payroll, subcontractors, material suppliers, and other personnel on the project site under the direction of the Contractor."

I.11 DEFINITIONS:

- A. "OWNER" refers to the Town of Killingworth, Middlesex County, the State of Connecticut or its duly authorized representative.
- B. "ENGINEER" refers to Nemergut Consulting, 235 Route 80, P.O. Box 666, Killingworth, Connecticut, 06417 and Glenn A. Johnson, P.E., 20 Alders Bridge Road, Killingworth, Connecticut, 06419.
- C. "CONTRACTOR" a person, firm, or corporation with whom this Contract is made by the Owner.

END OF SECTION 01013

SECTION 01020 - INSURANCE

PART I – GENERAL

I.01 CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall purchase and maintain during the term of the Contract such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's execution of the Work, whether such execution be by the Contractor or by any Subcontractor or by anyone for whose acts any of them may be liable, including but not limited to:

- (1) Claims under workman's compensation, disability benefit and other similar employee benefit acts;
- (2) Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
- (3) Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
- (4) Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and
- (5) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from.

I.02 LIMITS OF INSURANCE

The Proposer must provide a Certificate of Insurance upon execution of the contract with the Town of Killingworth with the following limits:

Commercial General Liability:	\$1,000,000
Auto Liability:	\$1,000,000
Excess/Umbrella:	\$5,000,000
Workers' Compensation:	statutory limits
Employers Liability:	\$1,000,000

Naming the Town of Killingworth as additional insured.

I.03 WORKMEN'S COMPENSATION

The Contractor shall procure and maintain, at the Contractor's expense, during the term of the Contract, in accordance with the provisions of the laws of the State in which the Work is performed, Workman's Compensation Insurance, including occupational disease provisions, for all of the Contractor's employees at the site of the Work and, in case any Work is sublet, the Contractor shall require such Subcontractor similarly to provide Workmen's Compensation

Insurance, including occupational disease provisions for all the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

In case any class of employees engaged in hazardous work under this Contract at the site of the Work is not protected under Workmen's Compensation, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of such employees otherwise protected.

I.04 BUILDER'S RISK

The Contractor shall procure and maintain, at Contractor's expense, "All Risk" type Builder's Risk Insurance for Work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Price in the Bid. The policy shall cover not less than the losses due to fire, explosion hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract time, and until the Work is accepted by the Owner. The policy shall name as the insured the Contractor and the Owner.

I.05 INDEMNIFICATION

The Contractor shall indemnify and hold harmless the Owner, Governing Agency and the Engineer and their agents and employees from and against all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claims, damages, losses or expenses are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting there from, and is caused in whole or in part by any negligent or willful act or omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the Owner or the Engineer, or any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workmen's Compensation acts, Disability Benefit acts or other employee benefits acts.

The obligation of the Contractor under this paragraph shall not extend to the professional liability of the Engineer, his agents or employees, arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, designs or specifications.

I.06 CERTIFICATES OF INSURANCE

Certificates of Insurance covering all insurance herein acceptable to the Owner shall be filed with the Owner prior to commencement of the work. These Certificates shall contain a provision that coverage's afforded under the policies will not be canceled unless at least thirty (30) days prior Written Notice has been given to the Owner.

END OF SECTION 01020

SECTION 01 01025 - BID ADDITION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS :

- A. Drawings and general provisions of contract, including General and Supplementary Conditions and Division I specifications sections, apply to work of this Section.
- B. Coordinate allowance work with related work to ensure that each selection is completely integrated and interfaced with related work.

1.02 DESCRIPTION OF REQUIREMENTS:

- A. Definitions and Explanations: Certain requirements of the work related to the Bid Addition are shown and specified in contract documents. The bid addition has been established to allow this work to be paid for on a lump sum basis.

Lump Sum prices include all necessary material, overhead, profit and applicable taxes.

- B. Times of bid additions scheduled herein for the work includes the following:

Establishment of Sedimentation and Erosion Control Measures
Site Preparation and Maintenance
Site Grading and creation of trail surfaces
Establishment of general lawn areas disturbed by Trail Construction activities
Site Restoration

1.03 SUBMITTALS:

- A. Payment for work performed under this Section will be paid on a lump sum basis and additional work as directed by the Engineer.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 SCHEDULE OF BID ADDITION:

- A. General Contractor
 - I. Bid Addition No. 1: The General Contractor shall include in his proposal the Lump Sum for Irene Sheldon Park Renovation which shall include the cost of furnishing all materials including General Earthwork, Restoration, and all equipment and labor necessary to complete the work.

END OF SECTION 01025

SECTION 01026 – LUMP SUM PRICES

PART 1 – GENERAL

I.01 RELATED DOCUMENTS

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

I.02 SUMMARY

- A. This section specifies administrative and procedural requirements for Lump Sum prices.

A Lump Sum Price is an amount proposed by Bidders and stated on the Bid Form as a Lump Sum for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract

Documents are increased or decreased.

Lump Sum prices include all necessary material, overhead, profit and applicable taxes.

The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01026

SECTION 01040 -PROJECT COORDINATION

PART I – GENERAL

I .01 RELATED DOCUMENTS

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

I.02 SUMMARY:

- A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:
- Coordination with Field Maintenance Contractor
 - Administrative and supervisory personnel
 - General installation provisions
 - Cleaning and protection
- B. Progress meetings, coordination meetings and pre-installation conferences are included in Section "Project Meetings".
- C. Requirements for the Contractor's Construction Schedule are included in Section "Submittals".

I.03 COORDINATION:

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

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

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

Make adequate provisions to accommodate items scheduled for later installation.

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

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

- B. Administrative Procedures: Coordinate scheduling and timing of required administrative

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

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

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

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

1.04 SUBMITTALS:

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

Show the interrelationship of components shown on separate Shop Drawings.

Indicate required installation sequences.

Comply with requirements contained in Section "Submittals".

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

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 CLEANING AND PROTECTION:

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

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

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

exposures include, but are not limited to, the following:

- Excessive static or dynamic loading
- Excessively high or low temperatures
- Excessively high or low humidity
- Water or ice
- Solvents
- Chemicals
- Puncture
- Abrasion
- Heavy traffic
- Soiling
- Combustion
- Misalignment
- Excessive weathering
- Unprotected storage
- Improper shipping or handling
- Theft
- Vandalism

END OF SECTION 01040

SECTION 01310 - SCHEDULES, REPORTS, PAYMENTS

PART I – GENERAL

I.01 RELATED DOCUMENTS

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

I.02 COORDINATION:

- A. Coordinate both the listing and timing of reports and other activities required by provisions of this and other sections, so as to provide consistency and logical coordination - between the reports. Maintain coordination and correlation between separate reports by updating at monthly or shorter time intervals. Make appropriate distribution of each report and updated report to all parties involved in the work including the Engineer and Owner. In particular, provide close coordination of the progress schedule, schedule of values, listing of subcontracts, schedule of submittals, progress reports, and payment requests.

I.03 PRELIMINARY PROGRESS SCHEDULE:

- A. Bar-Chart Schedule: Submit a bar-chart type progress schedule not more than 7 days after the date established for commencement of the work. On the schedule, indicate a time bar for each major category or unit of work to be performed at the site, properly sequenced and coordinated with other elements of work. Show completion of the work sufficiently in advance of the date established for substantial completion of the work.
1. Superimpose an S-curve, on the schedule to show the "estimated" total dollar-volume of work performed at any date during the Contract Time, with a column of cost figures in the left hand margin ranging from zero to the Contract Sum.
 2. Submittal Tabulation: With the bar-chart submittal, submit a tabulation, by date, of the submittals required during the first 14 days of Construction Time. This tabulation shall include both those submittals required during the initial 14 days of construction to maintain the orderly progression of the work, and those submittals required early because of long lead time for manufacture or fabrication. At the Contractor's option, submittal dates may be shown on the bar-chart schedule, in lieu of being tabulated.

I.04 FULLY-DEVELOPED PROGRESS SCHEDULE:

- A. Bar-Chart Schedule: Based on the preliminary development of the progress schedule, if any, and on whatever updating and feedback may have occurred during the project start-up, secure critical time commitments for performing major elements of the work. Within 14 days of the date established for "commencement of the work", submit a comprehensive bar-chart type progress schedule indicating, by stage-coded symbols, a time bar for each major category or unit of work to be performed at the site; include minor elements of work which are, nevertheless, involved in overall sequencing of the work. Arrange schedule to show graphically the major sequences of work necessary for the completion of related elements of work. Arrange the schedule to show how substantial completion is scheduled to allow for the Engineer's procedure for certification of substantial completion. Prepare and maintain the schedule on either a sheet

of sufficient width (or else a series of sheets) to show the required data clearly for the entire Construction Time. Prepare the schedule on sheets of stable transparency, or other reproducible material, to permit reproduction for the required distribution.

- B. Cost Correlation: Immediately below the date line at the heading of the bar-chart, provide A two item cost correlation line, indicating both "pre-calculated" and "actual" costs. This cost correlation line shall show dollar-volume of work performed as of the same dates used for preparation of payment requests. Refer to subsequent article for cost reporting and payment procedures. In so far as it is practical to do so, use the same units of work in the progress schedule as indicated in the "schedule of values" required by the General Conditions and further specified herein.

Superimpose an S-curve on the schedule (only first sheet for multiple-sheet schedule) to show the "pre-calculated" dollar-volume against time at any point during Contract Time. Provide a double column of figures in left hand margin, one column shall indicate a range from zero dollars to the Contract Sum, the other column shall indicate a percentage from zero to 100 percent. As the work progresses, and on each date used in payment requests, plot a second S-curve showing actual dollar-volume of work performed.

- C. Distribution: Following the initial submittal to and response by the Engineer, print and distribute progress schedules to the Engineer (3 copies), Owner, separate contractors, the principal subcontractors and suppliers or fabricators, and others with a need-to-know schedule-compliance requirement.

I.05 SCHEDULE OF VALUES:

- A. General: Prepare the schedule of values, as required by the General Conditions, in conjunction with the preparation of the progress schedule. Coordinate preparation of schedule of values and progress schedule. Correlate line items with other administrative schedules and the forms required for the work, including the progress schedule, payment request form, listing of subcontractors, schedule of allowances, schedule of alternates, listing of products and principal suppliers and fabricators, and the schedule of submittals. Provide breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of payment requests and progress reports. Break down principal subcontract amounts into several line items. Round off to the nearest whole dollar, but with the total equal to the Contract Sum.

- I. Schedule Updating: Update and resubmit schedule of values when change orders affect the listing and when the actual performance of the work involves necessary changes of substance to the values previously listed.

I.06 PAYMENT REQUESTS:

- A. General: Except as otherwise indicated, the progress payment cycle is to be regular. Each application must be consistent with previous applications and payments. Certain applications for payment, such as the initial application, the application at substantial completion, and the final payment application, involve additional requirements.
- B. Payment Application Times: The "date" for each progress "payment" is as indicated in Owner-Contractor Agreement or, if none is indicated therein, it is the 15th day of each

month. The period of construction work covered by each payment request is period indicated in Owner-Contractor Agreement or, if "non" is indicated therein, it is period ending 15 days prior to date for each progress payment, and starting day following end of preceding period.

C. Payment Application Forms: AIA Document G702 and Continuation Sheets; available from "Publications, a Division of the AIA Service Corporation", 1735 New York Avenue, NW, Washington DC 20006 (also available at most local AIA chapter offices).

D. Application Preparation: Except as otherwise indicated, complete every entry provided for on the form, including notarization and execution by authorized persons. Incomplete applications will be returned by Engineer without action. Entries must match current data of schedule of values and progress schedule and report. Listing must include amounts of change orders issued prior to last day of the "period of construction" covered by the application.

E. Initial Payment Application: The principal administrative actions and submittals which must precede or coincide with submittal of Contractor's first payment application can be summarized as follows, but not necessarily by way of limitation:

Listing of subcontractors and principal suppliers and fabricators

Schedule of values

Progress schedule (preliminary if not final)

Schedule of principal products

Schedule of submittals (preliminary if not final)

Listing of Contractor's staff assignments and principal consultants

Copies of acquired building permits and similar authorizations and licenses from governing authorities for current performance of the work

Performance and/or payment bonds

F. Application Time of Substantial Completion: Following issuance of Engineer's final "certificate of substantial completion", and also in part as applicable to prior certificates on portions of completed work as designated, a "special" payment application may be prepared and submitted by Contractor. The principal administrative actions and submittals which must proceed or coincide with such special applications can be summarized as follows, but not necessarily by way of limitation:

Warranties (guarantees) maintenance agreements and similar provisions of contract documents

Final cleaning of the work

Application for reduction (if any) of retainage, and consent of surety

Advise to Owner on coordination of shifting insurance coverages, including proof of extended coverages as required

Listing of Contractor's incomplete work, recognized as exceptions to Engineer's certificate of substantial completion.

Final Payment Application: The administrative actions and submittals which must precede or coincide with submittal of contractor's final payment application can be summarized as follows, but not necessarily by way of limitation:

Completion of project closeout requirements

Completion of items specified for completion beyond time of substantial completion (regardless of whether special payment application was previously made)

Assurance, satisfactory to Owner that unsettled claims will be settled and that work not actually completed and accepted will be completed without undue delay

Transmittal of required project construction records to Owner

Proof, satisfactory to the Owner, that taxes, fees and similar obligations of Contractor have been paid

Removal of temporary facilities, services, surplus material, rubbish and similar elements

Consent of Surety for final payment

- G. Application Transmittal: Submit 3 executed copies of each payment application, one copy of which is completed with waivers of lien and similar attachments. Transmit each copy with a transmittal form listing those attachments. Transmit each copy with a transmittal form listing those attachments, and recording appropriate information related to application in a manner acceptable to Engineer. Transmit to Engineer by means ensuring receipt within 24 hours.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01310

SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART I – GENERAL

I .01 RELATED DOCUMENTS:

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

I.02 DESCRIPTION OF REQUIREMENTS:

- A. General: This section specifies procedural requirements for non-administrative submittals including shop drawings, product data, samples and other miscellaneous work-related submittals. Shop drawings, product data, samples and other work-related submittals are -I required to amplify, expand and coordinate the information contained in the Contract Documents.

Refer to other Division I sections and other contract documents for specifications on administrative, non-work-related submittals. Such submittals include, but are not limited to, the following items:

- Permits
- Payment Applications
- Performance and Payment Bonds
- Insurance Certificates
- Inspection and Test Reports
- Schedule of Values
- Progress Reports
- Listing of Subcontractors

- B. Shop Drawings are technical drawings and data that have been specially prepared for this project.

Standard information prepared without specified reference to a project is not considered to be shop drawings.

- C. Product data includes standard printed information on manufactured products that has not been specially-prepared for this project, including, but not limited to, the following items:

- KBI Flex-Pave HD2000 Porous Pavement

I.03 SUBMITTAL PROCEDURES:

- A. General: Refer to the General Conditions for basic procedures for submitting handling:
- B. Coordination: Coordinate the preparation and processing of submittals with the performance of the work. Coordinate each separate submittal with other submittals and related activities such as testing, purchasing, fabrication, delivery and similar activities that require sequential activity.

Coordinate the submittal of different units of interrelated work so that one submittal will not be delayed by the Engineer's need to review a related submittal. The Engineer reserves the right to withhold action on any submittal requiring coordination with other submittals until related submittals are forthcoming.

- C. Scheduling: In each appropriate administrative submittal, such as the progress schedule, show the principal work-related submittals and time requirements for coordination of submittal activity with related work.
- D. Listing: Prepare a separate listing showing principal work-related submittals and their initial submittal dates as required for coordination of the work. Organize the listing by the related specification number sequence. Submit the listing within 15 days of the date of commencement of the work.
- E. Coordination of Submittal Times : Prepare and transmit each submittal to the Engineer sufficiently in advance of the scheduled performance of related work and other applicable activities. Transmit different kinds of submittals for the same unit of work so that processing will not be delayed by the Engineer's need to review submittals concurrently for coordination.
- F. Review Time: Allow sufficient time so that the installation will not be delayed as a result of the time required to properly process submittals, including time for re-submittal, if necessary. Advise the Engineer on each submittal, as to whether processing time is critical to the progress of the work, and if the work would be expedited if processing time could be shortened.

No extension of time will be authorized because of the Contractor's failure to transmit submittals to the Engineer sufficiently in advance of the work.

- G. Submittal Preparation: Mark each submittal with a permanent label for identification. Provide the following information on the label for proper processing and recording of action taken.

- Project name
- Date
- Name and address of Engineer
- Name and address of Contractor
- Name and address of Subcontractor
- Name and address of Supplier
- Name of Manufacturer
- Number and title of appropriate specification section
- Drawing number and detail reference, as appropriate
- Similar definitive information as necessary

Provide a space on the label for the Contractor's review and approval markings, and a space for the Engineer's "Action" marking.

Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Engineer, and to other destinations indicated, by use of a transmittal form. Submittals received from sources other than the Contractor will be returned to the Sender "without action".

H. Transmittal Form: AIA Document G810 or a form approved by the Engineer.

I.04 SPECIFIC SUBMITTAL REQUIREMENTS:

- A. General: Specific submittal requirements for individual units of work are specified in the applicable specification section. Except as otherwise indicated in the individual specification sections, comply with the requirements specified herein for each type of submittal.
- B. Submittal: Provide five (5) prints; two (2) prints will be retained, the remainder will be returned. One of the prints returned is to be marked up and maintained by the Contractor as a "Record Document".

I.05 ENGINEER'S ACTION:

- A. General: Except for submittals for the record and similar purposes, where action and return on submittal is required or requested, the Engineer will review each submittal, mark with appropriate "Action", and where possible return within five (5) days of receipt. Where the submittal must be held for coordination, the Engineer will so advise the Contractor without delay.
- B. Action Stamp: The Engineer will stamp each submittal to be returned with a uniform, self explanatory action stamp, appropriately marked and executed to indicate whether the submittal returned is for "revision and Re-submittal" or if satisfactory to the Engineer shall be marked to indicate "No Exception Taken".

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01 340

SECTION 01400 - QUALITY CONTROL SERVICES

PART I – GENERAL

I .01 RELATED DOCUMENTS:

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

I.02 SUMMARY:

- A. This Section specifies administrative and procedural requirements for quality control services.

Quality control services include inspections and tests and related actions including reports performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Engineer.

Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

Requirements of this section relate to testing of concrete cylinders, not production of standard products.

Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities.

Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.

Requirements for the Contractor to provide quality control services required by the Engineer, Owner, or authorities having jurisdiction are not limited to provisions of this Section.

I.03 RESPONSIBILITIES:

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Owner's responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. Costs for these services shall be included in the Contract Sum.

The Contractor shall employ and pay an independent agency, to perform specified quality control services.

- B. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility.

Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.

- C. Associated Services: The Contractor shall cooperate with agencies performing required Inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to:
1. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
 2. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 3. Providing facilities for storage and curing of test samples and delivery of samples to testing laboratories.
 4. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 5. Security and protection of samples and test equipment at the Project site.

- D. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Engineer and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.

The agency shall notify the Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.

The agency shall not perform any duties of the Contractor.

- E. Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

I.04 SUBMITTALS:

- A. The independent testing agency shall submit a certified written report of each inspection, test or similar service to the Engineer, in duplicate, unless the Contractor is responsible for the

service. If the Contractor is responsible for the service, submit a certified written report of each inspection, test or similar service through the Contractor, in duplicate.

Submit additional copies of each written report directly to the governing authority, when the authority so directs.

- B. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:

- Date of issue.
- Project title and number
- Name, address and telephone number of testing agency
- Dates and locations of samples and tests or inspections
- Name of individuals making the inspection or test
- Designation of the Work and test method
- Identification of product and Specification Section
- Complete inspection or test data
- Test results and an interpretation of test results
- Ambient conditions at the time of sample-taking and testing
- Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements
- Name and signature of laboratory inspector
- Recommendations on retesting

I.05 QUALITY ASSURANCE:

- A. Qualification for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and tests to be performed.

Each independent inspection and testing agency engaged on the Project shall be authorized by authorized having jurisdiction to operate in the State in which the Project is located.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate - deficiencies, including deficiencies in visual qualities of exposed finishes.

Protect construction exposed by or for quality control service activities, and protect repaired construction.

Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION 01400

SECTION 01420 – REFERENCES

PART I – GENERAL

I.01 RELATED DOCUMENTS

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

I.02 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. “Approved”: When used to convey Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. “Directed”: A command or instruction by Engineer. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Installer": Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- J. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to Trades people of the corresponding generic name.
- K. "Experienced": When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project;

being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

- L. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

I.03 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Engineer for a decision before proceeding.
- D. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer for a decision before proceeding.
- E. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
- F. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.
- G. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ADAAG	Americans with Disabilities Act (ADA)	
	Accessibility Guidelines for Buildings and Facilities	
	Available from Access Board	(800) 872-2253
	www.access-board.gov	(202) 272-5343

CFR	Code of Federal Regulations Available from Government Printing Office www.access.gpo.gov/nara/cfr	(888) 293-6498 (202) 212-1530
CRD	Handbook for Concrete and Cement Available from Army Corps of Engineers Waterways Experiment Station www.wes.army.mil	(601) 634-2355
DOD	Department of Defense Specifications and Standards Available from Defense Automated Printing Service //astimage.daps.dla.mil/online	(215) 697-6257
FED-STD	Federal Standard (See FS) FS Federal Specification Available from Defense Automated Printing Service	(215) 697-

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

BOCA	BOCA International, Inc. www.bocai.org	(708) 799-2300
CABO	Council of American Building Officials (See ICC)	
IAPMO	International Association of Plumbing and Mechanical Officials www.iapmo.org	(909) 595-8449
ICBO	International Conference of Building Officials www.icbo.org	(800) 284-4406 (562) 699-0541
ICC	International Code Council www.intlcode.org	(703) 931-4533

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers and Web site addresses are subject to change and are believed to be up-to-date as of the date of the Contract Documents.

EPA

Environmental Protection Agency

www.epa.gov

(202) 260-2090

PRODUCTS (Not Used)

EXECUTION (Not Used)

END OF SECTION

SECTION 01500 - TEMPORARY FACILITIES

PART I – GENERAL

I .01 RELATED DOCUMENTS

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

I.02 SUMMARY:

- A. This section specifies requirements for temporary services and facilities, including construction and support facilities, security and protection.
- B. Temporary construction and support facilities required include but are not limited to:
- Storage sheds
 - Sanitary facilities, including drinking water
 - Waste disposal services
 - Telephone
 - Maintenance and Protection of Traffic
- C. Water: Provide potable water approved by local health authorities.

I.03 EQUIPMENT:

- A. General: Provide new equipment; if acceptable to the Engineer, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.
- B. Storage Sheds: Provide prefabricated or mobile units or similar job-built construction with lockable entrances.
- C. Temporary Toilet Units: Provide self-contained single-occupant toilet units of the chemical, aerated recirculation, or combustion type, properly vent+ and fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material.
- D. First Aid Supplies: Comply with governing regulations.
- E. Temporary Telephone: Provide cell phone or mobile phone service.

I.04 QUALITY ASSURANCE:

- A. Regulations: The Contractor shall comply with local laws and regulations governing construction and local industry standards, in the installation and maintenance of temporary services and facilities, including, but not limited to, the following:
1. Building codes, including local requirements for permits, testing and inspection.
 2. Health and safety regulations.
 3. Utility company regulations and recommendations governing temporary utility services.
 4. Fire Department rules and regulations.
 5. Police and Rescue Squad recommendations.
 6. Environmental protection regulations governing use of water and energy, and control of dust, noise and other nuisances.

I.05 JOB CONDITIONS:

- A. General: The Contractor shall provide each temporary service and facility ready for use at each location, when first needed to avoid delays in performance of work. Maintain, expand as required, and modify as needed throughout the progress of the work. Do not remove until services or facilities are no longer needed, or are replaced by the authorized use of completed permanent facilities.
- B. Temporary Use of Permanent Facilities: Regardless of previously assigned responsibilities for temporary services and facilities, the Installer of each permanent service or facility shall assume responsibility for its operation, maintenance and protection during use as a construction facility prior to the Owner's acceptance and operation of the facility.
- C. Conditions of Use: Operate temporary services and facilities in a safe and efficient manner. Do not overload, and do not permit temporary services and facilities to interfere with the progress of work. Do not allow unsanitary conditions, public nuisances or hazardous conditions to develop or persist on the site.
1. Temporary Utilities: Do not permit freezing of pipes, flooding or contamination of water sources.
 2. Temporary Construction and Support Facilities: Maintain temporary facilities in a manner to prevent discomfort to users. Take necessary fire prevention measures. Maintain temporary facilities in a sanitary manner so as to avoid health problems.
 3. Security and Protection: Maintain site security and protection facilities in a safe, lawful, publicly acceptable manner. Take measures necessary to prevent site erosion.

I.06 MAINTENANCE AND PROTECTION OF TRAFFIC:

General

Detailed requirements as outlined in Item I shall apply to this Section of the work.

A. Flagmen

The Contractor shall provide flagmen on each end of the trenching on any street. These flagmen shall be alert to warning vehicular and pedestrian traffic of any movement of construction equipment, blasting or any unsafe areas where they should not travel.

B. Flares and Lights

The Contractor shall provide flares and lights around any material stockpiled in the road, any open excavation, soft trenches, or anything hazardous to the public. The Contractor shall have someone in the vicinity of these flares and lights to periodically check them through the night to insure proper operation.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 INSTALLATION:

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interferences with performance of the Work. Relocate and modify facilities as required.

Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION:

- A. Locate storage sheds, sanitary facilities and other temporary construction and support facilities for each access.

Maintain temporary construction and support facilities until near Substantial Completion. Remove prior to Substantial Completion.

- B. Storage and Fabrication Sheds: Install storage and fabrication sheds, sized, furnished and equipped to accommodate materials and equipment involved.

- C. Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.

Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used materials.

- D. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
- E. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a healthy and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
- F. Drinking Water Facilities: Provide containerized tap-dispenser bottled-water type drinking water units, including paper supply.
- G. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg. F (27 deg. C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

3.03 SECURITY AND PROTECTION FACILITIES INSTALLATION:

- A. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed provide lighting, including flashing red or amber lights.
- B. Enclosure Fence: When excavation begins, install an enclosure fence. Locate where indicated, or enclose the entire site or the portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs and other animals from easily entering the site.
- C. Security Enclosure: Install substantial temporary enclosure of partially completed areas of construction. Provide entrances to prevent unauthorized entrance, vandalism, theft, and similar violations to security.
 - I. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- D. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or f m s near the site.

3.04 OPERATION, TERMINATION AND REMOVAL:

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended use to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
- C. Termination and Removal: Unless the Engineer requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, estore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

I. Materials and facilities that constitute temporary facilities are property of the Contractor.

END OF SECTION 01500

SECTION 01700 - PROJECT CLOSEOUT

PART 1 – GENERAL

1.01 RELATED DOCUMENTS:

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

I. Summary:

This section specifies administrative and procedural requirements for project closeout, including, but not limited to:

Inspection procedures
Project record documents submittals
Final cleaning

1.02 DESCRIPTION OF REQUIREMENTS:

- A. Definitions: Project closeout is the term used to describe certain collective project requirements, indicating completion of the Work that are to be fulfilled near the end of the Contract time in preparation for final acceptance and occupancy of the Work by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.

Specific requirements for individual units of work are included in the appropriate sections in Divisions 2 through 02810.

Time of closeout is directly related to "Substantial Completion"; therefore, the time of closeout may be either a single time period for the entire work or a series of time periods for individual elements of the work that have been certified as substantially complete at different dates. This time variation, if any, shall be applicable to the other provisions of this section.

1.03 PREREQUISITES TO SUBSTANTIAL COMPLETION:

- A. General: Complete the following before requesting the Engineer's inspection for certification of substantial completion, either for the entire Work or for portions of the Work. List known exceptions in the request.

In the progress payment request that coincides with, or is the first request following, the date of substantial completion is claimed, show either 100% completion for the portion of the Work claimed as "substantially complete", or list incomplete items, the value of incomplete work, and reasons for work being incomplete. Include supporting documentation for completion as indicated in these contract documents.

Submit a statement showing an accounting of changes to the Contract Sum.

Advise Owner of pending insurance change-over requirements.

Obtain and submit releases enabling Owner's full, unrestricted use of the Work and access to services and utilities. Where required, include occupancy permits, operating certificates and similar releases.

Advise the Owner's personnel of the change-over in - security provisions.

Complete final cleaning up requirements.

- B. Inspection Procedures: Upon receipt of Contractor's request for inspection the Engineer will either proceed with inspection or advise Contractor of unfulfilled prerequisites.

Following the initial inspection, the Engineer will either prepare the certificate of substantial completion, or will advise Contractor of work which must be performed before the certificate will be issued. The Engineer will repeat the inspection when requested and when assured that the Work has been substantially completed.

Results of the completed inspection will form the initial "punch-list" for final acceptance.

I.04 PREREQUISITE TO FINAL ACCEPTANCE:

- A. General: Complete the following before requesting the Engineer's final inspection for certification of final acceptance, and final payment as required by the General Conditions. List known exceptions, if any, in request.

Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

Submit an updated final statement, accounting for final additional changes to the Contract Sum.

Submit a certified copy of the Engineer's final punch-list of itemized work to be completed or corrected stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Engineer.

Submit two (2) completed copies of AIA Document G707, Consent of Surety to Final Payment.

Submit two (2) completed copies of AIA Document G706, Release of Liens.

Submit two (2) completed copies of AIA Document G-706A, Release of Liens.

Submit two (2) completed copies of Verified Statement of Prevailing Wages.

- B. Re-inspection Procedure: The Engineer will re-inspect the Work upon receipt of the Contractor's notice that the work, including punch-list items resulting from earlier inspections, has been completed, except for these items whose completion has been delayed because of circumstances that are acceptable to the Engineer. Upon completion of re-inspection, the Engineer will either prepare a certificate of final

acceptance, or will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled, but are required for final acceptance.

If necessary, the re-inspection procedure will be repeated.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 FINAL CLEANING:

A. General: Special cleaning requirements for specific units of Work are included in the appropriate sections. General Cleaning during the regular progress of the Work is required by the General Conditions and is included under section "Temporary Facilities".

B. Cleaning: Provide final cleaning of the Work at the time indicated.

Complete the following cleaning operations before requesting the Engineer's inspection for certification of substantial completion.

Clean the project site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas to a broom-clean condition; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth, even-textured surface.

C. Removal of Protection: Except as otherwise indicated or requested by the Engineer, remove temporary protection devices and facilities which were installed during the course of the work to protect the previously completed work during the remainder of the construction period.

D. Compliance: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at the site. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile or other harmful materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

END OF SECTION 01700