

September 2015

Project Manual and Technical Specifications:

# **Onna Moniz-John Park and Central Avenue Playground**

## **Athletic Court Improvements Project**

Map 205, Block 18, Parcel 29

Central Avenue, East Providence, RI

RFP # 14/15-39

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Administered by:  
The City of East Providence, RI



Designed by:



**Kevin M. Alverson**  
LANDSCAPE ARCHITECTURE

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## LIST OF DRAWINGS

### Project Title:

Onna Moniz-John Park and Central Avenue Playground  
Athletic Court Improvements Project  
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### Contract Drawings:

Contract Drawings shall be those plans entitled, '*Onna Moniz-John Park/Central Avenue Playground Athletic Court Improvements Project*', sheets 1-2 of 2, dated September, 2015, as prepared by Kevin M. Alverson Landscape Architecture

### List of Drawings:

<i>Drawing Number</i>	<i>Drawing Title</i>
Sheet 1 of 2	Overall Layout and Site Preparation Plan
Sheet 2 of 2	Court Layout Details

**SUMMARY OF WORK**  
**Section 01010**

Part 1 - General:

1.01 — Work Covered by Contract Documents:

- A. Base Bid: The work to be done under this Contract, 'Onna Moniz-John Park and Central Avenue Playground Athletic Court Improvements Project', consists of furnishing and installation of athletic court improvements, including repair of existing basketball courts, color sport surfacing, and new basketball goals, as specified, and as shown on the Contract Drawings.
- B. Contract Adjustments: Contract Adjustments and procedures for said adjustments to Scope of Work during the Course of Construction are outlined in other sections of this Project Manual, including, but not necessarily limited to, Section 01035 of these specifications.

1.02 — Schedule of Work:

- A. The Contractor is required to submit a detailed Schedule of Work outlining the anticipated tasks and specific project schedule for the successful completion of the project. This shall be submitted to the Owner's Representative after a Pre-construction conference to be scheduled between the Owner, the Owner's Representative, and the Contractor, and prior to the start of construction. The schedule shall be updated every two weeks during construction procedures.
- B. The Contractor is advised of the following when preparing the required Schedule of Work:
  - 1. The Contractor shall coordinate input from all Subcontractors and Suppliers in the preparation of this schedule.
  - 2. The Contractor's operations, scheduling, and site access shall be coordinated with the Owner.
  - 3. Work at night, on Sundays, or on major Holidays will be prohibited without explicit Owner's written permission except in the case of emergency. The Contractor shall provide, at his own expense, all lighting, traffic control, safety equipment, and other facilities necessary for the proper execution of the work.

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1.03 — Contract Drawings and Specifications:

The Contract Drawings shall be those drawings entitled, 'Onna Moniz-John Park/Central Avenue Playground Athletic Court Improvements Project,' as prepared by Kevin M. Alverson Landscape Architecture, dated September 2015, as amended.

- B. The Contract Drawings and Specifications are included in the Contract Documents, and intended to complement each other. All work called for by either shall be as binding as if called for by both.
- C. The Contractor shall thoroughly acquaint himself with the Project Site, Contract Agreement, and all requirements of the Specifications and Contract Drawings. For reference, these Specifications are separated into sections. All sections are complimentary and as such shall not operate to make the Owner's Representative an arbiter to establish jurisdictional limits.
- D. Additional Drawings, Memoranda, Illustrations, etc., prepared during the course of construction to clarify or interpret the Project Specifications, or modify the contract during construction shall be incorporated into the Contract Documents, and will be considered part of the Project Record.
- E. All Drawings, Specifications and Memoranda relative to the work are the property of the Owner and shall be returned to the Owner's Representative at the completion or cessation of the work.

1.04— Obligations of the Contractor:

- A. The contractor shall furnish all labor, materials, plant, supplies, equipment, tools and all other facilities necessary to the proper and complete construction of the project, as required by the Contract Drawings and as specified herein.
- B. Throughout the duration of the Contract, wherever it is specified that work is to be done, or labor, materials or equipment are to be furnished, it is understood to mean that the said work to be done or the labor, materials or equipment to be furnished is to be supplied or done by the Contractor at his own proper cost or expense.
- C. Errors and/or Discrepancies:
  - 1. The Contractor shall verify all quantities and measurements as may be shown on the Contract Drawings or called for in the Specifications and shall notify the Owner's Representative of all discrepancies, errors or omissions found therein.

**SUMMARY OF WORK**  
**Section 01010**

2. The Contractor shall notify the Owner's Representative immediately of any apparent ambiguity, error or omission in the Contract Drawings or Specifications. The failure to correctly or specifically mention or note any portion of the work, the proper performance of which is evidently necessary to fulfill the general intention of the Contract Drawings and Specifications, shall not act to release the Contractor from the proper performance of such work in the identical manner if fully and correctly indicated and without expense to the Owner beyond the stipulated Contract price or prices. The forgoing shall not apply to additions, improvements or changes for which provisions have been otherwise made.

**D. Mutual Responsibility:**

1. If the Contractors or Subcontractors suffer loss or damage to their work through acts of neglect on part of General Contractor, then General Contractor agrees to satisfactorily arrange for settlement with other such Contractor or Subcontractor, if other such Contractor or Subcontractor will so settle.
2. If, however, such other Contractor or Subcontractor chooses to assert claim against Owner, on account of damage alleged to have been sustained, Owner shall notify Contractor, who shall defend, at his expense, any suit based on such claims, and, if judgment or claims against Owner shall be allowed, Contractor shall pay or satisfy such judgment or claims, and pay costs and expenses in connection with same.

**E. Legal Address of the Contractor:**

1. The address given in the Proposal submitted by the Contractor and the Contractor's office are hereby designated as places to either of which notices, letters and other communications to the Contractor shall be certified, mailed or delivered. The delivering at the above-named place, or depositing in a postpaid package directed to the first-named place, in any post office box regularly maintained by the Post Office Department, or any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor and the date of said service shall be the date of such delivery or mailing. The first-named address may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the Owner's Representative. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

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**Section 01010**

F. Employees of the Contractor:

1. The Contractor shall employ a competent, experienced Superintendent and Foreman to represent him at the several parts of the work. These persons shall be present at all times while the work entrusted to them is in progress and shall be fully informed regarding it. The Superintendent shall be satisfactory to the Owner's Representative and shall represent and have full authority to act for the Contractor in his absence. All other persons employed on the work shall be competent and skillful persons.

G. Safety Precaution Measures (Generally):

1. The Contractor shall take all necessary precautions to conduct his operations in such a manner so as to provide maximum possible safety for all employees on the work and the public as well. The Contractor shall provide suitable barricades, bridges, railings and similar protection around and over excavations and open trenches so as to insure maximum protection. All State and Federal Laws applicable to the work shall receive compliance.
2. The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the Owner and the Owner's Representative.

H. Permits and Licenses:

1. The Contractor shall secure and pay for all local town, State, & Federal permits and licenses necessary for the execution of the work.
2. The Contractor shall give such notices, comply with all laws, ordinances, rules or regulations having bearing on the conduct of the work, The Contractor shall indemnify the Owner, its officers and agents against claim or liability arising from failure to comply with such rules, laws or ordinances by himself, his employees or Subcontractors. Fees shall be waived for Municipal permits only.

1.05 — Obligations of the Owner:

- A. The Owner will provide all land and easements necessary for the construction of all permanent structures called for by the Contract. The limits of the land acquired for the permanent construction are shown on the Contract Drawings.

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1.06 — Obligations of the Owner's Representative:

- A. The Owner's Representative shall be the interpreter of the requirements of the Contract Documents and the judge of the performance there under by both the Owner and Contractor. The Owner's Representative shall render interpretations necessary for the proper execution or progress of the work with reasonable promptness on written request of either the Owner or the Contractor, and shall render written decisions, within a reasonable time, on all claims, disputes and other matters in question between the Owner and the Contractor relating to the execution or progress of the work or the interpretation of the Contract Documents.
- B. Interpretations and decisions of the Owner's Representative shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in written or graphic form. In the capacity of interpreter and judge, the Owner's Representative shall endeavor to secure faithful performance by both the Owner and the Contractor, shall not show partiality to either, and shall not be liable for the result of any interpretation or decision rendered in good faith in such capacity.
- C. The Owner's Representative shall have authority to reject work that does not conform to the Contract Documents. Whenever, in the Owner's Representative's reasonable opinion, it is necessary or advisable for the implementation of the intent of the Contract Documents, the Owner's Representative will have authority to require special inspection or testing of the work in accordance with the provisions of the Contract Documents, whether or not such work be fabricated, installed or completed.
- D. The Owner's Representative will not control over, take charge of or, be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, since these are solely the Contractor's responsibility.

1.07 Site Control and General Protection Measures:

- A. The Contractor shall, at his own expense, protect all work completed or partially completed under this Contract and shall be solely responsible for the care and protection of all materials covered by this Contract. Damage, loss, or injury from any cause whatsoever shall be made good by the Contractor at his own expense. The method of providing against such damage, loss or injury is left to the discretion of the Contractor. All damaged work must be replaced to the satisfaction of the Owner's Representative at no cost to the Owner.
- B. Utility Protection and "DIG-SAFE DAMAGE PREVENTION SYSTEM: All Contractors or Subcontractors performing drilling, boring, auguring, jetting, sheeting or pile

## SUMMARY OF WORK

### Section 01010

Installation, soil preloading for consolidation, demolition, excavation or like work shall, prior to commencement of these activities, shall verify utility locations by contacting DIG SAFE (888-DIG-SAFE (344-7233) or dial 811), in accordance with the laws of the State of RI.

1. Contractor shall be responsible for injury to water pipes, gas pipes, oil pipes, electrical wires, conduits, drains, sewers, fiber optic cables and other structures that may be met within the project area, owned by individuals, by firms or corporations, or by the municipality. Contractor shall be liable for damages to public or private property resulting there from.

Shore or sling up in their places, without injury, gas pipes, water pipes, oil pipes, gasoline pipes, electrical conduits and other structures, public service owned, or controlled by individuals, firms or corporations, which may be intercepted during and by work under this Contract. Maintain them in constant operation except as, may be required to connect and disconnect from them.

#### 1.08 — Weather Conditions:

- A. No work shall be done when in the opinion of the Owner's Representative the weather is unsuitable. The Contractor shall be responsible for the protection of all completed or partially completed work as a result of extreme weather conditions. The Contractor shall be fully aware of the extremes of weather conditions in the area in regards to the depth of frost and snowfall, and the degree and length of sub-freezing temperatures during the winter season. If there is delay or interruption in the work due to weather conditions, the necessary measures must be taken to bond new work to old. Only such work as will not suffer injury to workmanship or materials will be permitted in inclement weather.
- B. Should tornado, hurricane, gale or heavy wind warnings be issued, the Contractor shall take every practicable precaution to minimize the danger to persons, to the work, and to adjacent properties. Such damage caused to any part of the work shall be rectified or replaced to the complete satisfaction of the Owner's Representative and at no expense to the Owner. Injury to personnel or damage to adjacent property because of the work shall be the complete responsibility of the Contractor, and he accepts exclusive liability for same.

#### t09— Loading:

- A. No part of any work involved in this Contract shall be loaded during construction with a load greater than it is calculated to carry with safety. Should any accidents or

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**Section 01010**

damage occur through any violation of this requirement, the Contractor shall be held responsible under his Contract and Bond.

1.10— Partial Occupancy:

- A. The Owner shall have the right to take possession of or use any part of the completed or partially completed work prior to final acceptance.
- B. Should Partial Occupancy be desired by Owner, the Owner will give notice thereof to Contractor, and such occupancy shall be upon the following terms:
  - 1. The occupancy or use of any area shall not constitute acceptance of work not performed in accordance with the Contractor, nor relieve Contractor of liability to perform any work required by Contract but not completed at time of said occupancy.
  - 2. The general guarantee period, called for in General Conditions, for work substantially completed shall not begin to run until issuance of certificate by Owner's Representative.
  - 3. Contractor shall be relieved of all maintenance costs on portions occupied under this Agreement.
  - 4. Contractor shall not be responsible for wear and tear or damage resulting from Partial Occupancy as agreed to by Owner and Contractor.
  - 5. Owner shall assume risk of loss with respect to any portion occupied by it under the terms of this Agreement. However, Contractor shall assume full responsibility for loss or damage traceable to his fault or negligence in the performance of his Contract.

1.11 — Materials and Workmanship:

- A. All work shall be done in a neat, workmanlike manner. All materials, equipment and workmanship shall fully conform to the requirements of the Contract Documents and shall be in every respect in accordance with the best modern practice. All materials and equipment shall be new and of standard first-grade quality and design. Materials and equipment shall be assembled and erected in a neat, workmanlike manner and in proper level and alignment.

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**Section 01010**

1.12 — Other Requirements:

A. Grades, Lines and Layout:

1. Contractor shall determine the finish grades and lines in the field as provided by the elevations of the existing grades and surfaces specified to remain.
2. Deviation from established grades or lines determined by the elevations of the existing grades and surface, etc., specified to remain, will not be permitted except by written approval of Owner's Representative, or unless obvious error exists in designated grades or lines.

B. Water: The Contractor shall not operate any valves nor tie-into the water service unless approval has been received from the Owner.

C. Electric: The Contractor shall not tie-into the electric service unless approval has been received from the Owner and appropriate Utility Company(ies),

D. Environmental Regulations: The Contractor shall conform operations to all applicable environmental regulations.

**End of Section**

**MODIFICATION PROCEDURES**  
**Section 01035**

**Part 1— General:**

1.01 — Related Documents:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section 01010 "Summary of Work" for requirements for the Contractor's Construction Schedule.
  - 2. Division 1 Section 01631 "Substitutions" for administrative procedures for handling requests for substitutions made after award of the Contract.

1.02 Minor Changes in the Work:

- A. Minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time/Schedule may be requested by the Owner or Owner's Representative. Should such minor changes be requested, Owner's Representative will issue supplemental instructions authorizing this work.

1.03 Change Order Proposal Requests:

- A. Owner-Initiated Proposal Requests: The Owner's Representative will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal requests issued by the Owner's Representative are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
  - 2. Within 1 day of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Owner's Representative for the Owner's review.
  - 3. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.

## MODIFICATION PROCEDURES

### Section 01035

4. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  5. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
- B. Contractor-Initiated Proposals: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Owner's Representative.
1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
  2. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Comply with requirements in Section 01631 "Substitutions" if the proposed change requires substitution of one product or system for a product or system specified.
- C. Change Order/Proposal Request Form: All Change Order Documentation shall be provided by contractor on appropriate standardized AIA forms.

#### 1.04 — Construction Change Directive:

- A. Construction Change Directive: When the Owner and the Contractor disagree on the terms of a Proposal Request, the Owner's Representative, upon request by the Owner, may issue a Construction Change Directive on appropriate AIA Form. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine change in the Contract Sum or Contract Time.

## MODIFICATION PROCEDURES

### Section 01035

- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and times adjustments to the Contract.

#### 1.05 — Change Order Procedures:

- A. Upon the Owner's approval of a Proposal Request, the Contractor will issue a Change Order for signatures of the Owner and the Owner's Representative. Use appropriate AIA standardized documents for Change Order Proposals.

Part 2 - Products (Not Applicable)

Part 3 - Execution (**Not Applicable**)

**End of Section**

## REGULATORY REQUIREMENTS

### Section 01060

#### Part 1 - General:

##### 1.01 — General Permitting:

- A. The Contractor shall abide by all local, state, and federal regulations and regulatory authorities for all aspects of this project, including, but not necessarily limited to local building code, Rhode Island Department of Environmental Management (RIDEM) regulations, Local Utility Commissions, RI Governor's Commission on Disabilities, The Americans with Disabilities Act, and Conservation and Preservation Authorities.
  
- B. Because this project is funded with federal funds, additional requirements apply such as, but not limited to, the following: Section 3 hiring goals and reporting, Equal Opportunity, WBE & MBE goals, Section 504 regulations regarding accessibility requirements, Davis-Bacon Act, as amended (40 U.S.C. 3141-3148), Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708), Rights to Inventions Made Under a Contract or Agreement, Clean Air Act (42 U.S.C. 7401-7671q.), the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, Energy Policy and Conservation Act (42 U.S.C. 6201), Byrd Anti-Lobbying Amendment (31 U.S.C. 1352), Environmental Compliance (24 CFR 85.36(0)(12)). These requirements will be made a part of any contract entered into for this Project.

##### 1.02 — Related Documents:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### Part 2—Products (Not Applicable)

#### Part 3 — Execution (Not Applicable)

**End of Section**

## REFERENCE STANDARDS AND DEFINITIONS

### Section 01095

#### Part 1— General:

##### 1.01— Related Documents:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

##### 1.02 — Definitions:

- A. General: Defined below are Terms utilized throughout these project specifications and Contract Documents. Additionally, basic contract definitions may be included in the Conditions of the Contract between Owner and Contractor.
- B. Definitions:
1. Approved: The term "approved," when used in conjunction with the Owner's Representative's action on the Contractor's submittals, applications, and requests, is limited to the Owner's Representative's duties and responsibilities as stated in the Conditions of the Contract.
  2. Directed: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Owner's Representative, requested by the Owner's Representative, and similar phrases.
  3. Experienced: The term "Experienced", or "Experience" when used with the term "installer," means having a minimum of 5 previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of authorities having jurisdiction.
  4. Furnish: The term "furnish" means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation, and similar operations,
  5. Indicated: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. Location is not limited.
  6. Install: The term "install" describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying,

## REFERENCE STANDARDS AND DEFINITIONS

### Section 01095

working to dimension, finishing, curing, protecting, cleaning, and similar operations.

7. Installer: The term "installer" refers to the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
  8. Project Site: The term "Project Site" is the space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
  9. Provide: The term "provide" means to furnish and install, complete and ready for the intended use.
  10. Regulations: The terms "regulations", "regulators", and "regulatory", include laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
  11. Testing Agencies: The terms "testing agency" or "testing agencies", refer to an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.
- C. Trades: Using terms 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 tradespersons of the corresponding generic name.
- D. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
1. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to

## REFERENCE STANDARDS AND DEFINITIONS

### Section 01095

interfere with local trade-union jurisdictional settlements and similar conventions.

#### 1.03 — Specification Format and Content Explanation:

- A. Specification Format: These Specifications are organized, generally, into Sections and Divisions based on CSIs 16-Division format. Where variations exist between the format of these specifications and those of the Standard CSI Format, the organization of these Contract Documents shall take precedence. In all Project Records, Contractor shall refer to any specifications by the codifications utilized in these specifications.
  
- B. Specification Content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
  - 1. Abbreviated Language: Language used in Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be interpolated as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates,
  
  - 2. Streamlined Language: These Specifications generally use the imperative mood and streamlined language. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.
  
  - 3. The words "shall be" are implied where a colon (1 is used within a sentence or phrase.

#### 1.04 — Industry Standards:

- A. Applicability of Standards: Except where 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 the standards in effect as of the date of the Contract Documents.



## REFERENCE STANDARDS AND DEFINITIONS

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AISI	American Iron and Steel Institute 1101 17th St., NW Washington, DC 20036-4700	(202) 452-7100
ANSI	American National Standards Institute 11 West 42nd St., 13th Floor New York, NY 10036	(212) 642-4900
ASTM	American Society for Testing and Materials 1916 Race St, Philadelphia, PA 19103-1187	(215) 299-5400
FM	Factory Mutual Systems 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062	(617) 762-4300
NEC	National Electrical Code (from NFPA)	
NECA	National Electrical Contractors Assoc. 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814	(301) 657-3110
NFPA	National Fire Protection Assoc. One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101	(617) 770-3000
UL	Underwriters Laboratories 333 Pfingsten Rd. Northbrook, IL 60062	(708) 272-8800

2. Federal Government Agencies: Names and titles of federal government standards, or Specification producing agencies are often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standards or Specification producing agencies of the federal government. Names and addresses are subject to change and are believed, but are not assured, to be accurate and up-to-date as of the date of the Contract Documents.

## REFERENCE STANDARDS AND DEFINITIONS

### Section 01095

OSHA Occupational Safety and Health Administration  
(U.S. Department of Labor)  
200 Constitution Ave., NW  
Washington, DC 20210

(202) 219-6091

#### 1.05 —Submittals:

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

**Part 2 - Products (Not Applicable)**

**Part 3 - Execution (Not Applicable)**

**End of Section**

# SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

## Section 01340

### Part 1— General:

#### 1.01 — Requirements Included:

- A. Submit Shop Drawings, Product Data and Samples required by the Contract Documents.
- B. Shop Drawings:
  - 1. Drawings shall be presented in a clear and thorough manner.
  - 2. Shop Drawings and Details shall be identified by reference to sheet and detail shown on Contract Drawings, or Contract Specification Section and Subsection.
  - 3. Minimum Sheet Size: 8 1/2 inch by 11 inch.
- C. Product Data:
  - 1. Preparation:
    - a. Clearly mark each copy to identify pertinent products or models.
    - b. Product Data shall be identified by reference to sheet and detail shown on Contract Drawings, or Contract Specification Section and Subsection.
    - c. Show performance characteristics, capacities and efficiencies, as well as showing dimensions and clearances required.
    - d. Where applicable, show utility, wiring, or piping, etc., diagrams and controls as may be appropriate.
  - 2. Manufacturer's Standard Schematic Drawings and Diagrams:
    - Modify Drawings and Diagrams to delete information that is not applicable to the work.
    - b. Supplement standard information to provide information specifically applicable to the work.

**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**  
**Section 01340**

D. Samples:

1. Office samples: Samples shall be of sufficient size and quantity to clearly illustrate:
  - a. Functional characteristics of the product, with integrally related parts and attachment devices.
  - b. Full range of color, texture and pattern.
2. Field Samples and Mark-ups: Contractor shall erect, at the project site, at a location acceptable to the Owner's Representative.
  1. Size or Area: That specified in the respective Specification Section.
  4. Fabricate each sample and mark-up complete and finished.
  5. Remove mark-ups at conclusion of work or when acceptable to the Owner's Representative.

1.02 — Contractor Responsibilities:

- A. Review Shop Drawings, Product Data and Samples prior to submission.
- B. Determine and Verify:
  1. Field measurements.
  2. Field construction criteria.
  3. Catalog numbers and similar data.
  4. Conformance with Specifications.
- C. Coordinate each submittal with requirements of the work and of the Contract Documents.
- D. Notify the Owner's Representative in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents, stating the difference in value between the Contract Requirements and those illustrated on the Shop Drawings submitted for review.
- E. No fabrication or work which requires submittals shall begin until submittals are reviewed and approved by Owner's Representative.

## SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

### Section 01340

#### 1.03 — Owner's Representative Duties:

- A. The Owner's Representative will check and review Shop Drawings, Product Data, and Submittals only for conformance with the Design Concept and for compliance with information given in the Contract Documents. Review by the Owner's Representative of submittals is only for general conformance with the design concept of the project and general compliance with the information in the Contract Documents. Any approval or denial of submittals is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions which shall be fabricated and correlated at the job site, fabrication processes and techniques of construction, coordination of his work with that of all other trades, and the satisfactory performance of his work to fulfill the requirements and intent of the Contract Documents, Such review will not relieve the Contractor from responsibility for errors of any sort in the Shop Drawings, nor for the proper coordination of any such submittal with all other work.
- B. Following review, the Owner's Representative will affix a stamp and initials or signature indicating determinations made for each submittal in accordance with the following classifications:
1. "Approved", indicates that the Submittal is Approved by the Owner's Representative noting no exception to the intent of the Contract Documents. Fabrication or ordering of item may commence.  
  
"Approved with Changes Noted", indicates that the Submittal is Approved by the Owner's Representative with minor corrections or additions noting no exception to the intent of the Contract Documents. No further review of submittal is required and item may be fabricated or ordered on basis of and following the corrections noted.
  3. "Revise and Resubmit" indicates that no fabrication may be commenced, and that the Contractor must resubmit the Submittal to the Owner's Representative only after appropriate revisions are made to meet the intent of the Contract Documents.
  4. "Rejected" indicates the Submittal's non-conformance with the Contract Requirements, or that too many corrections would be necessary to meet the intent of the Contract Documents. The Owner's Representative will state the reasons for rejection.
- C. Following Review and Determinations made, Stamped Submittals are to be returned to the Contractor for their file, distribution, and/or for resubmission.

**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**  
**Section 01340**

1.04— Contractor's Submission Requirements:

- A. Make submittals promptly in accordance with reviewed schedule, and in such sequence as to cause no delay in the work or in the work of any other Contractor.
- B. No submittals will be accepted by the Owner's Representative if transmitted via FAX Machine.
- C. Scheduling of Submittals: Scheduling of Submittals shall be the responsibility of the Contractor, and shall be so submitted in proper sequence, in order of appropriate lead-time of fabrication and priority of construction procedures, following a logical schedule of construction procedures. Such scheduling shall allow reasonable time for review, revisions, resubmission, and rechecking where required, until material submitted is acceptable to Owner's Representative. Contractor shall schedule submittals to allow the Owner's Representative adequate time for checking and processing. Such submittal schedule dates shall recognize the possibility of rejections and/or required resubmission. Such schedules shall be subject to change from time to time, as required, by mutual agreement of the Owner's Representative and the Contractor.
- D. No work shall commence in the shop or on the job nor shall material be delivered to the site until pertinent Shop Drawings have been reviewed and approved by the Owner's Representative.
- E. Product Specific Items, Equipment, or Materials: Specific manufacturers' names and catalog numbers are used herein to establish quality and design of a particular item. Where items, equipment, or materials in the Plans and Specifications reference a particular brand, manufacturer, or trade name, it is understood that a reviewed and approved equal product may be substituted by the Bidder or Contractor only following approval by the Owner's Representative.
- F. If the Contractor proposes to use a material which deviates in any way from the detailed requirements of the Contract Documents, he shall inform the Owner's Representative in writing of the nature of such deviations at the time the material is submitted for review. Contractor shall request a review of the deviation from the requirements of the Contract Documents. Proposed Deviated Material must be suitable for the intended use, and Contractor must provide evidence of this when the request is made, and prior to review by Owner's Representative
  - 1. Evidence provided by Contractor shall lead to a reasonable certainty that the proposed substitution or deviation will provide a result at least equal in quality to that specified. If, in the opinion of the Owner's Representative, the evidence presented by the Contractor does not provide a sufficient basis for such

## SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

### Section 01340

reasonable certainty, the Owner's Representative will reject such substitution or deviation without further investigation. The Contractor must then resubmit with a material which meets the Project Specifications.

- G. A Contractor or Subcontractor who carries the cost of a substituted product in his Bid with no prior review by the Owner's Representative, does so at his own risk. The Owner's Representative is in no way obligated to review nor allow a substitution to be furnished. The Contractor shall submit all requests for substitutions sufficiently ahead of need to cause no delay in the job because of the subsequent rejections and/or resubmissions,
- H. Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the Contractor, notwithstanding review or acceptance of such substitution by the Owner or the Owner's Representative, unless such substitution was made at the written initiation of the Owner. Any additional cost for redesign of any components for a substituted product shall be borne by the Contractor unless such substitution was initiated in writing by the Owner.

Only Shop Drawings or Submittals received from the General Contractor will be considered for review by the Owner's Representative. All Shop Drawings or Submittals prepared by Subcontractors shall be processed through the General Contractor in the same manner as stipulated in the paragraphs above. The General Contractor shall check all Shop Drawings and Submittals for conformity with the Contract Documents and particularly for field measurement and proper fit with adjoining work prior to submitting same to the Owner's Representative for review. Certification shall appear on each Shop Drawing or Submittal stating that the General Contractor has made this check. Terms such as "by others" or "not by (this supplier or Subcontractor)" shall not be used on Shop Drawings or Submittals; the Contractor shall state by whom related items are to be furnished, supplied, and/or installed. The Owner's Representative reserves the right to reject and return to the Contractor, without examination, any Shop Drawings or Submittals which have not been previously checked and certified by the General Contractor, or which in any way obviously are not in conformity with Contract Requirements.

**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**  
**Section 01340**

J. Shop Drawings:

1. Shop Drawings shall show the design, dimensions, connections, and other details necessary to insure that they accurately interpret the contract Documents and shall show adjoining work in such detail as required to provide proper connection with same. Where adjoining work also requires Shop Drawings, they shall be submitted for review at the same time to ensure that connections can be accurately checked.
2. Submit two (2) legible blackline prints of each Shop Drawing with sufficient blank space (minimum 4 inches by 2 inches) for the Owner's Representative's annotations and review stamp, except as otherwise called for herein. The Shop Drawing(s) shall be delivered to the Owner's Representative in flat or roll form. The Owner's Representative will make annotations directly on the blackline, stamp same with appropriate review, and return original to the Contractor.
3. Shop Drawings marked "Approved" or "Approved with Changes Noted" shall be used by the General Contractor to obtain and distribute the prints necessary for fabrication and construction. They shall then be copied and returned to vendor or Subcontractor from whom they were originally received.
4. Shop Drawings marked "Revise and Resubmit" or "Rejected" shall be used by the General Contractor to make a record print and then copied and returned to vendor or Subcontractor who made the submittal for corrections required. Submittals marked "Rejected" or "Revise and Resubmit" shall not be sent to job site or used for shop fabrication.
5. This procedure shall be repeated until all corrections are made to the satisfaction of the Owner's Representative. The reviewed Shop Drawing(s) will be returned to the Contractor who in turn will be responsible for making prints in sufficient numbers for his own and his Subcontractors' use.

K. Product Data:

1. Submit two (2) legible copies with sufficient blank space (minimum 4 inches by 2 inches) for the Owner's Representative's annotations and review stamp, except as otherwise called for herein.

Data sheets shall show illustrated cuts of item to be furnished, scale details, dimensions, capacity, performance, characteristics, efficiencies, wiring diagrams, controls, and other pertinent information, as applicable. If more than one type of size is shown on these sheets, the item being submitted shall be clearly denoted.

## SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

### Section 01340

3. Product Data Submittals marked "Approved" or "Approved with Changes Noted" shall be used by the General Contractor to obtain and distribute the prints necessary for fabrication and construction. They shall then be copied and returned to vendor or Subcontractor from whom they were originally received.
4. Product Data Submittals marked "Revise and Resubmit" or "Rejected" shall be used by the General Contractor to make a record print and then copied and returned to vendor or Subcontractor who made the submittal for corrections required. Submittals marked "Rejected" or "Revise and Resubmit" shall not be sent to job site or used for shop fabrication.
5. This procedure shall be repeated until all corrections are made to the satisfaction of the Owner's Representative. The reviewed Product Data Submittal(s) will be returned to the Contractor who in turn will be responsible for making prints in sufficient numbers for his own and his Subcontractors' use.

#### L. Samples:

1. Each Sample submitted by the Contractor shall clearly note the appropriate Specification Section, as noted in these specifications.

Samples and related certificates shall be delivered to location designated by Owner's Representative. Samples requiring testing should be submitted to testing laboratory with adequate time to provide approximately twenty (20) days following completion of testing, and from date of receipt of results by Owner's Representative to date of completion of review by Owner's Representative.

3. Each sample shall be labeled to indicate material, trade name, place or origin, name of producer, name of Contractor, name of project, and Specification section correlated to these specifications. Samples must be packaged and delivered in such a manner as to reach destination in good condition. Letter of transmittal shall accompany samples and shall include certificate as to compliance with Contract Requirements.
4. No materials submitted for review and/or testing shall be delivered to Project Site until reviewed and approved by Owner's Representative.
5. Review of samples shall be deemed to be general only, and shall not constitute waiver of Owner's rights to demand full compliance with Contract Requirements. After actual delivery of material to site, Owner's Representative will make such inspection and testing as deemed necessary, and may reject such materials,

## **SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

### **Section 01340**

equipment and accessories for cause, even though such items may have been given general review.

6. When a sample has been designated "Approved" or " Approved with Changes Noted", no change in brand or make may be made unless manufacturer fails to make satisfactory delivery or the delivered material fails to conform with Contract Requirements.
7. If materials, equipment or accessories which fail testing have been incorporated in work, Owner shall have the right to demand their removal and replacement by proper materials, or to demand and secure such reparation by Contractor as is equitable at the Contractor's expense.
8. Samples designated as "Rejected" or "Revise and Resubmit" will be returned to Contractor upon request, and at his expense, within thirty (30) days after rejection,

**M. Submittals, Unless Otherwise Noted, Shall Contain:**

1. The date of submission and the dates of any previous submissions.
2. The project title and number.
3. Contract identification and/or Correlating Specification Section(s).
4. The names of: Contractor, Supplier, and Manufacturer
5. Field dimensions, clearly identified as such,
6. Relation to adjacent or critical features of the work or materials,
7. Applicable standards, such as ASTM or Federal Specification Numbers.
8. Identification of deviations from Contract Documents.
9. Identification of revisions on resubmittals.
10. An 4" x 2" blank space for Owner's Representative stamps,
11. Contractor's stamp, initialed or signed, certifying their review of submittal, and other pertinent information such as verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and of Contract Documents.

**1.05— Resubmission Requirements:**

- A. Make any corrections or changes in the submittals required by the Owner's Representative and resubmit until they are denoted "Approved" or "Approved with Changes Noted" by the Owner's Representative.

## **SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

### **Section 01340**

**B. Resubmitted Submittals:**

1. Contractor shall revise initial drawings or data and resubmit as specified by the Owner's Representative on the returned initial submittal.
2. Contractor shall indicate any changes which have been made other than those requested by the Owner's Representative.

**C. Resubmitted Samples:**

1. Contractor shall submit new samples as required by Owner's Representative on the returned initial submittal.

**1.06 — Distribution:**

**A. Contractor shall Distribute reproductions of Shop Drawings and copies of product data which carry the Owner's Representative stamp denoting "Approved" or "Approved with Changes Noted" to:**

1. Job Site File.
2. Record Documents File.
3. Other Affected Contractors.
4. Subcontractors.
5. Supplier or Fabricator.
6. As directed by the Owner's Representative

**1.07— Operation, Instruction, and Maintenance Manual:**

- A. Two (2) bound copies of the Operation, Instruction, and Maintenance Manual shall be**
- submitted to Owner's Representative for approval prior to beginning of Contract Closeout Procedures (See Section 01700 of this Project Manual). If the Manual is satisfactory, submit five (5) copies of the final manual as directed by Owner's Representative. If the Manual is not satisfactory, one (1) copy will be returned to the Contractor. When unsatisfactory Manuals are resubmitted, two (2) copies will again be required. Upon final acceptance by the Owner's Representative, submit five (5) bound copies of the final manual as directed by Owner's Representative.
- B. All elements and components of the equipment installed or furnished as part of the project shall be included in the Manual including a description of how the equipment or complete system works. Additionally, where a number of components are furnished to provide a complete system, the operation of the components as they relate to the complete system shall be described.**

## **SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

### **Section 01340**

- C. The Manual shall include all necessary instruction for the maintenance and operation of the equipment installed or furnished as part of the project in accordance with the manufacturer's recommendations. The Manuals shall include, but not limited to the following:
1. Index or Table of Contents.
  2. A complete written description of the operation of the equipment.
  3. Clear and concise maintenance instruction including schedules and types of finishes.
  4. Detailed drawings.
  5. Plumbing and/or wiring diagrams and control schematics including connection diagrams, as appropriate.
  6. Complete parts lists including the specific part or identification number utilized by the manufacturer of the parts.
  7. Recommended spare parts list.
  8. Current parts price list.
  9. All calibrations and other data for future modifications, alterations or reconfigurations shall be completely indicated and described.
  10. Pages are to be numbered consecutively through all sections of the Manual.
  11. Shop Drawing submittal data.
- D. Only data pertaining to the specific equipment installed or furnished as part of the project shall be included.
- E. The Manual(s) shall be bound in a heavy gauge three (3) ring vinyl binder with a minimum of two (2) interior vinyl pockets, or similar binding approved by the Owner. The color of the manual front and back cover will be chosen by the Owner.
- F. The Manual(s) shall be identified by title on the front cover, back cover and spine and shall include the Name of Project, Name of Owner, Title of Manual (identifying type or name of equipment), and Project Completion Date.

**End of Section**

**SCHEDULE OF VALUES**  
**Section 01370**

**Part 1— General:**

1.01 — Related Requirements:

- A. Conditions of the Contract between Owner and Contractor.
- B. Section 01035 "Modification Procedures"
- C. Section 01700 "Contract Closeout"

1.02 — Form and Content of Schedule of Values:

- A. Submit Schedule of Values in duplicate, as soon as practicable after notification of selection for the award of Contract, and prior to the Scheduled Pre-Construction Meeting and start of work.
- B. Submit typed schedule on AIA Form G703 — Application and Certificate for Payment, Continuation Sheet. Identify schedule by including AIA Form G702, filling all the blanks in the upper portion.
- C. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- D. Elements included on Schedule of Values shall follow the Codification and Table of Contents as noted in this Project Manual as the format for listing and identifying component items.
- E. For each major line item list sub-values of major products or operations, as appropriate or requested by Owner's Representative, under the line.
- F. For the various portions of the work:
  - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
  - 2. For items on which progress payments will be requested for stored materials, break down the value into:
    - a. The cost of materials, delivered and unloaded

**SCHEDULE OF VALUES**  
**Section 01370**

- b. The total installed value.
- 3. Submit schedule values of work prior to application for payment for such work.
- G. The sum of all values listed in the schedule shall equal the total Contract Sum.
- H. Revise schedule to list approved Change Orders, with each Application for Payment.

End of Section

**QUALITY CONTROL**  
**Section 01400**

**Part 1— General:**

1.01 - Inspection and Tests:

- A. In addition to those components of the project specifically outlined in the Contract Documents for specialized testing and submittals, the Contractor shall not use any material or equipment in the work which has not been inspected and reviewed by reputable professionals qualified to review such materials and/or equipment. Ample time and opportunity shall be given the Owner's Representative for testing materials to be used in the work, should the Owner's Representative request additional testing. The Contractor shall promptly advise the Owner's Representative upon the placing of orders for materials so that arrangements may be made, if desired, for the testing of materials at the place of manufacture.
- B. The Owner may decide to have some or all of the materials inspected or tested as required. The Contractor shall furnish all samples, labor, materials and equipment necessary for the inspection and tests required and should anticipate possible delays caused by this testing and acceptance procedure. Scheduling shall be coordinated as necessary and the project schedule adapted, if needed.
- C. Seals and Pressure Testing: All piping, pumps and like equipment transporting liquid shall be first tested with water and then with the material they will carry when in final operation. The Contractor shall pay for all electric power and fuel necessary for the operation of all mechanical equipment prior to completion of the Contract. All equipment and appliances shall be subject to acceptance tests prior to final payment.
- D. The Owner's Representative or any person employed by him in connection with the work shall, at any time, have the right to enter upon the work and inspect the work and any materials being used in the work. Contractor shall provide ample time and facilities for such inspection. The contractor also shall provide all reasonable facilities for viewing the work by the owner or any representatives or Agencies having jurisdiction in regard to the work.

1.02 — Experience of Equipment Manufacturer:

- A. Whenever it is written that an equipment manufacturer must have a specified period of experience with his product, a manufacturer who does not meet with the specified experience period can be considered. However, such manufacturer shall only be considered if the equipment supplier or manufacturer is willing to provide a Bond or Cash Deposit for the duration of the specified time period which will guarantee replacement of that equipment in the event of failure.

End of Section

# CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

## Section 01500

### Part 1— General:

#### 1.01 — Requirements Included:

- A. Contractor shall furnish, install and maintain construction facilities and temporary controls required for construction, as specified herein, and remove said construction facilities and temporary controls on completion of work.

#### 1.02 — Regulatory Agencies:

- A. Contractor shall comply with all Federal, State and Local Codes, Laws, Ordinances and Regulations and with all pertinent utility company requirements.

### Part 2— Products:

#### 2.01— Materials, General:

- A. Material may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.
- B. Contractor shall coordinate any and all interruptions of permanent utilities with utility companies and affected users.

#### 2.02— Temporary Sanitary Facilities:

- A. Contractor shall provide sanitary facilities in compliance with local, state, and federal laws and regulations. Such facilities shall be properly secluded from public view.
- B. Contractor shall service, clean and maintain facilities and enclosures. 2.03

#### — Hoisting Facilities:

- A. Contractor shall provide hoisting facilities as required for the vertical movement of all materials.
- B. Contractor and Facilities or Materials shall comply with OSHA, and all local, state, and federal regulations.
- C. Contractor shall maintain all facilities in compliance with the law.

## CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

### Section 01500

#### 2.04 — Temporary Barriers:

- A. Contractor must provide barricades, guards, coverings, lighting, warning lights and signs as required by Federal, State, and Local Regulations to protect obstructions in streets and sidewalks, open trenches and pits, hazards and like items. Mark and light barricades and guards as required.
- B. The Contractor shall, at times, employ watchmen when such action is required to prevent injury or damage to the public. The contractor shall indemnify and protect the Owner from any damage or injury caused by any act or neglect of the Contractor or his Subcontractors.
- C. Contractor shall comply with OSHA and all local, state, and federal regulations with regard to standards and requirements for guardrails, openings and stairways.

#### 2.05— Protection:

- A. The contractor shall at all times protect new construction, old construction, all job materials, apparatus and fixtures from rain, wind, snow, ice, dust, dirt, mud, ground water, back-up or leakage of sewers, drains, or other piping and from water of any other origin and shall remove promptly any accumulation of the above. Contractor shall provide and operate all pumps, piping and other equipment necessary to this end at no additional cost to Owner.
- B. Contractor shall thoroughly protect all completed work and all stored materials.
- C. When needed, Contractor shall provide boards, cloths, planks, waterproof paper, canvas or other approved protection and use as necessary to prevent any damage.
- D. Contractor must provide protective measures to prevent damage to lawns, trees and shrubs specified to remain after project is complete.
- E. At the end of each day's work, Contractor shall protect such work that may be susceptible to damage by the elements.
- F. Contractor shall replace or rectify work or materials damaged by workmen, by the elements or by any other cause, to the satisfaction of the Owner's Representative at no additional expense to the Owner.
- G. Contractor shall repair streets, curbs, sidewalks, poles, grass, shrubs, trees or other existing site features, if disturbed by construction operations or contractor personnel. Contractor must leave all existing site features specified to remain in as good condition as they were before being disturbed.

## CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

### Section 01500

- H. Do not allow workmen, including those of any Subcontractor or supplier to mark finished surfaces with marking pens or other such devices which are not readily erasable.

#### 2.06 —Traffic:

- A. The Contractor shall at all times keep roads and sidewalks open for pedestrian and vehicular traffic. The Contractor shall bridge or construct plank crossing over trenches where required or as directed by the Owner's Representative.
- B. When portions of a travel way are made dangerous for the movement of vehicles or pedestrians, the Contractor shall employ a sufficient number of uniformed police officers, flagmen, or traffic men to direct the traffic safely through the area as required by Federal, State, and Local Regulations. If such conditions exist at the close of the working day, a watchman and a sufficient number of flagmen or police officers shall be assigned by the Contractor to direct traffic at night. The work must be planned to avoid such conditions whenever possible. Cost for traffic control shall be included in the Base Bid and born by the Contractor.

#### 2.07 —Security:

- A. The Contractor shall take all precautions necessary to prevent loss or damage caused by vandalism, theft, burglary, pilferage, or unexplained disappearance of property of the Owner or this Contractor, whether or not forming part of the work, located within the limits of work. The contractor shall have full responsibility for the security of such property located in such areas and shall reimburse the Owner for any such loss, damage or injury, except such as may be directly caused by agents or employees of the Owner.

#### 2.08— Project Access:

- A. Contractor shall provide access from adjacent road, as approved by the Owner, and maintain such access in a safe and neat condition throughout the construction process. Construction Access, as coordinated with Owner, shall be protected throughout construction. Contractor shall inspect Construction Access Regularly, and repair access as needed
- B. Storage areas shall be as directed and approved by the Owner. Storage areas shall be protected in accordance with Drawings and General Provisions of Contract, including General and Supplementary Conditions, Section 01060 of these Specifications, and Division 2 Specification Sections as they apply to work of this Section.

## CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

### Section 01500

#### 2.09 —Temporary Controls:

- A. Control of Snow and Ice: Contractor shall remove snow and ice as required for safety, access, and proper execution of work. Remove snow and ice build-up which endanger structures during construction. Cost for snow and ice removal shall be included in the Base Bid and born by the Contractor. No extra payment will be made for such work.
- B. Trash Control:
1. Contractor shall maintain premises and properties free from accumulation of waste, debris and rubbish caused by operations.
  2. Contractor must provide sufficient trash receptacles around site.
  3. Contractor shall collect and deposit debris in appropriate and legal collection facilities.
  4. Contractor shall remove all debris from the job site on a regular basis.
- C. Hazards Control:
1. Contractor shall store volatile wastes in sealed covered containers, approved for storage of such wastes, in accordance with all local, State, and Federal regulations, and remove wastes from premises daily.
  2. Contractor must prevent accumulation of wastes which create hazardous conditions.
  3. Contractor shall provide adequate ventilation during use of volatile or noxious substances.
  4. Should any hazardous waste be caused by the Contractor, the Contractor shall correct the situation in the proper, legal manner and remove and dispose such waste at no loss or cost to the Owner.
- D. Cleaning and Disposal:
1. Contractor shall conduct cleaning and disposal operations in compliance with all Local, State, and Federal Ordinances and Anti-Pollution Laws.
  2. Contractor must not burn or bury rubbish or waste materials on project site.

## **CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS**

### **Section 01500**

3. Contractor must not dispose of volatile wastes such as mineral spirits, oil or paint thinner, etc., in storm or sanitary drains, or waters of the State.
4. Contractor must not dispose of wastes into streams or waterways.
5. Contractor shall maintain cleaning procedures until project or portion thereof is occupied by Owner.

**E. Storage Areas:**

1. Contractor shall coordinate the allocation of storage areas to the various trades and Subcontractors.
2. All storage areas shall be approved by the Owner's Representative.
3. Contractor must maintain all storage areas in a clean condition at all times.
4. Field houses, storage sheds, and work facilities for workmen shall be the responsibility of the Contractor or their Sub-Contractors and shall be removed by them following construction procedures for each task these facilities may be needed.

**Part 3— Execution:**

**3.01 — General:**

- A. Contractor must maintain and operate temporary utility systems, where necessary, to assure continuous service. Such temporary utility systems must be modified and extended by the Contractor as work progress requires.

**3.02 — Interference with Existing Structures:**

- A. Whenever it may be necessary to cross or interfere with existing culverts, drains, water pipes or fixtures, guardrails, fences or other such structures needing special care, due notice shall be given by the Contractor to the Owner's Representative and to the various public and private agencies or individuals responsible for the utility or structure that is interfered with.
- B. Whenever required, all objects shall be strengthened by the Contractor to meet any additional stress that the work herein specified may impose upon it. Any damage caused shall be thoroughly repaired by the Contractor at their own expense. The entire work shall be the responsibility of the Contractor. All damaged items of work or

## **CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS**

### **Section 01500**

items required to be removed and replaced or repaired by the Contractor to the complete satisfaction of the property Owners and/or the Owner's Representative, shall be repaired or replaced at no additional expense to the Owner.

#### 3.03 — Removal of Construction Facilities and Temporary Controls:

- A. Contractor shall completely remove temporary materials and equipment when their use is no longer required.
- B. Upon completion of work of all trades and before final acceptance of entire project, each trade shall remove, at own expense, all wiring, appurtenances, and accessories used in performance of its respective work.
- C. Temporary sheds, utilities, barricades, signs and other appurtenances related to execution of the work, and not incorporated in the permanent construction, shall be completely removed by the Contractor from the site prior to acceptance of work by Owner.
- D. Contractor shall clean and repair any and all damage caused by temporary installations or use of temporary facilities.

**End of Section**

**MATERIAL AND EQUIPMENT**  
**Section 01600**

**Part 1— General:**

1.01 — Requirements Included:

- A. Material and Equipment Incorporated Into the Work:
  - 1. Shall conform to applicable Specifications and Standards.
  - 2. Shall comply with size, make, type and quality specified or as specifically reviewed by the Owner's Representative.
  
- B. Manufactured and Fabricated Products:
  - 1. Products shall, be designed, fabricated, and assembled in accordance with the best engineering and shop practices and Industry Standards.
  - 2. Like parts of duplicate units shall be manufactured to standard sizes and gages, to be interchangeable.
  - 3. Two (2) or more items of the same kind shall be identical and manufactured by the same manufacturer.
  - 4. Products shall be suitable for service conditions.
  
- C. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically reviewed and approved by Owner's Representative.
  
- D. Contractor shall not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 — Manufacturer's Instructions:

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, Contractor shall obtain and distribute copies of such instructions to parties involved in the installation, including two (2) copies to Owner's Representative.
  
- B. Contractor shall maintain one (1) set of complete instructions at the job site during installation and until completion. Copies of all instructions shall be included in final Contract Record Documents, as assembled by the Contractor.

**MATERIAL AND EQUIPMENT**  
**Section 01600**

- C. Contractor shall handle, install, connect, clean, prepare, acclimatize, and adjust products in strict accord with such instructions and in conformity with specified requirements.
- D. Should job conditions or specified requirements conflict with manufacturer's instructions, Contractor shall consult with Owner's Representative for further instructions,
- E. Contractor shall not proceed with work without clear instructions.
- F. Contractor shall perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.03 —Transportation and Handling:

- A. Contractor must arrange deliveries of products in accordance with construction schedules, and coordinate appropriately so as to avoid conflict with work and conditions at the site and when two (2) or more trades, Contractors or suppliers are involved.
- B. All materials and equipment shall be transported on legally approved conveyances as required or recommended by the respective manufacturer or supplier.
- C. All products shall be delivered in undamaged condition, in manufacturer's original containers or packaging, and with identifying labels intact and legible.
- D. Contractor shall receive and handle all materials and equipment, at the project site, by conveyances or methods as recommended by the respective manufacturer or supplier to prevent damage to products.
- E. Immediately on delivery, Contractor shall inspect shipments to assure compliance with requirements of Contract Documents and reviewed submittals, and that products are properly protected and undamaged.
- F. Contractor shall remove from the site any material or item of equipment damaged during the transportation or handling process and immediately replace at no additional cost to the Owner.

**MATERIAL AND EQUIPMENT**  
**Section 01600**

1.04 -- Storage and Protection:

- A. Products shall be stored in accordance with manufacturer's instructions with seals and labels intact and legible.
- B. Contractor shall store products subject to damage by the elements in weather tight enclosures.
- C. Contractor shall take appropriate measures to maintain temperature and humidity of materials within the ranges required by manufacturer's instructions.
- D. Contractor shall maintain all storage areas in a clean and orderly condition at all times. 1.05

-- Exterior Storage:

- A. Contractor shall store fabricated products above the ground, on blocking and skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, and provide adequate ventilation to avoid condensation.
- B. Loose granular materials shall be stored in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- C. Contractor shall arrange storage in a manner to provide easy access for inspection. Contractor shall make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
- D. Contractor must immediately replace any material or item of equipment damaged due to inadequate storage protection at no additional cost to the Owner.

1.06-- Protection after Installation:

- A. Contractor shall provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove Protections only when they are no longer needed.

**MATERIAL AND EQUIPMENT**  
**Section 01600**

1.07— Certificates of Conformance and Manufacture:

- A. In addition to other requirements specified therein, the Contractor shall furnish to the Owner's Representative, in the manner as directed, three (3) signed certificates of conformance and manufacture that all materials and/or equipment to be furnished under this Contract meets the Specification Requirements. When directed, each shipment of material shall be accompanied by the manufacturer's signed certificates of conformance and manufacture. Unless otherwise specified, all testing of materials shall be provided by the Contractor at no additional expense to the Owner.
  
- B. Each manufacturer's certificate shall be endorsed or accompanied by the Contractor's certificate that the material certified by the manufacturer will be the material incorporated in the work.

**End of Section**

**SUBSTITUTIONS**  
**Section 01631**

**Part 1— General:**

1.01 — Related Documents:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section,.

1.02— Summary:

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
1. Section 01340 "Shop Drawings, Product Data and Samples"
  2. Section 01600 "Materials and Equipment"

1.03 — Definitions:

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents,
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents that are proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
1. Substitutions requested during the proposal period, and accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
  2. Revisions to the Contract Documents requested by the Owner or Owner's Representative.
  3. Specified options of products and construction methods included in the Contract Documents.
  4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

**SUBSTITUTIONS**  
**Section 01631**

1.04— Submittals:

- A. Substitution Request Submittal: The Owner's Representative will consider requests for substitution if received within 14 days after commencement of the Work. Requests received more than 14 days after commencement of the Work may be considered or rejected at the discretion of the Owner's Representative.
1. Contractor shall submit copies of each request for substitution for consideration to the Owner's Representative. Submit requests in the form and according to procedures required for change-order proposals.
  2. Contractor shall identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers for reference.
- 1 Contractor shall provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
- a. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors, that will be necessary to accommodate the proposed substitution.
  - b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
  - c. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
  - d. Samples, where applicable or requested.
  - e. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
  - f. Cost information, including a proposal of the net change, if any in the Contract Sum.
  - g. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.

**SUBSTITUTIONS**  
**Section 01631**

h. The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.

B. Owner's Representative's Action: If necessary, the Owner's Representative will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Owner's Representative will notify the Contractor of acceptance or rejection of the substitution within 1 week of receipt of the request, or one week of receipt of additional information or documentation. Acceptance will be in the form of a change order.

1. If the Owner's Representative cannot make a decision on the use of a proposed substitute within the time allocated, Contractor shall use the product specified.

**Part 2 — Products:**

2.01— Substitutions:

A. Conditions: The Owner's Representative will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Owner's Representative. If the following conditions are not satisfied, the Owner's Representative will return the requests without action except to record noncompliance with these requirements.

1. Extensive revisions to the Contract Documents are not required.
2. Proposed changes are in keeping with the general intent of the Contract Documents.
3. The request is timely, fully documented, and properly submitted.
4. The specified product or method of construction cannot be provided within the Contract Time. The Owner's Representative will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
5. The request is directly related to an "or-equal" clause or similar language in the Contract Documents.
6. The requested substitution offers the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional

**SUBSTITUTIONS**  
**Section 01631**

responsibilities the Owner must assume. The Owner's additional responsibilities may include compensation to the Owner's Representative for redesign and evaluation services, increased cost of other construction by the Owner, and similar considerations.

7. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.
  9. The specified product or method of construction cannot be coordinated with other materials and where ,the Contractor certifies that the proposed substitution can be coordinated.
  10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
- B. Where a proposed substitution involves more than one prime contractor, each contractor shall cooperate with the other contractors involved to coordinate the Work, provide uniformity and consistency, and assure compatibility of products.
- C. The Contractor's submittal and the Owner's Representative's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

**Part 3— Execution (Not Applicable)**

**End of Section**

**CONTRACT CLOSE-OUT**  
**Section 01700**

**Part 1-- General:**

1.01 Requirements Included:

- A. Comply with requirements stated in conditions of the Contract and in Specifications for administrative procedure in closing out the work.

1.02— Substantial Completion:

- A. Substantial Completion: As defined by the AIA, and defined herein in accordance with these Specifications, "Substantial Completion" is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or use the Work or a portion thereof for its intended use.
- B. When Contractor considers the work is substantially complete, he or she shall submit to Owner's Representative for review:
  - 1. A written notice that the work or designated portion thereof is "Substantially Complete".
  - 2. A list of items to be completed or corrected prior to achievement of Final Completion (to be referred to as "Punch List").
- C. Within a reasonable time after receipt of such notice, Owner's Representative will review the work to determine the status of completion.
- D. Should Owner's Representative determine that the work is *not* "Substantially Complete":
  - 1. Owner's Representative will promptly notify the Contractor in writing, giving the reasons therefore.
  - 2. Contractor shall remedy the deficiencies in the work and send a second written notice of substantial completion to the Owner's Representative.
  - 3. Owner's Representative will again review the work.
- E. When Owner's Representative concurs that the work is substantially complete, he will:

**CONTRACT CLOSE-OUT**  
**Section 01700**

1. Prepare a Certificate of Substantial Completion accompanied by Contractor's list of items to be completed or corrected (Punch List), as verified and amended by the Owner's Representative.
2. Submit the Certificate to Owner, Contractor, and Manufacturer (as may be appropriate) for their written acceptance of the responsibilities assigned to them in the Certificate.

1.03— Final Review:

- A. When Contractor considers the work is complete, he shall submit written certification that:
  1. Contract Documents have been reviewed.
  2. Work has been inspected for compliance with Contract Documents.
  3. Work has been completed in accordance with Contract Documents, including completion of all Punch List Items.
  4. Equipment and systems have been tested in the presence of the Owner's Representatives and are operational.
  5. All Work is complete and ready for final review.
- B. Owner's Representative will make final review to verify that status of completion with reasonable promptness after receipt of such certification,
- C. Should Owner's Representative consider that the work is incomplete or defective:
  1. Owner's Representative will promptly notify the Contractor in writing, listing the incomplete or defective work.
  2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Owner's Representative that the work is complete.
  3. Owner's Representative will again review the work.
- D. When the Owner's Representative finds that the work is acceptable under the Contract Documents and that all Punch List Items have been accomplished to the

**CONTRACT CLOSE-OUT**  
**Section 01700**

Owner's Representative's satisfaction, he or she shall request the Contractor to make close-out submittals.

1.04 — Fees for Additional Reviews:

- A. Should Owner's Representative perform additional reviews due to failure of the work to comply with the claims of status of completion made by the Contractor:
  - 1. Owner will compensate Owner's Representative for such additional services.
  - 2. Owner will deduct the amount of such compensation from the final payment to the Contractor.

1.05 — Contractor's Close-Out Submittal to Owner's Representative:

- A. Operation, Instruction, and Maintenance Manual: Contractor shall provide bound copies of the Operation, Instruction, and Maintenance Manual, in accordance with Section 01340 of these Specifications.
- B. Operating and Maintenance Data:
  - 1. Contractor shall instruct the Owner's Personnel with regard to equipment, systems and operating specialties which are installed as part of this project.
  - 2. Contractor shall submit brochures indicating operating instructions and maintenance schedules for all equipment, systems, operating devices and specialties.
  - 3. Contractor shall submit detailed maintenance methods and schedules for all materials and equipment provided in this project.
- C. Warranties, Guarantees and Bonds: In addition to the Warranty and Guarantee Requirements of the General Conditions, provide all other guarantees, bonds, affidavits, and certifications required throughout the Specifications.
- D. Contractor shall provide all spare parts and maintenance materials to Owner, unless otherwise specified.

1.06— Final Adjustment of Accounts:

- A. Submit a Final Statement of Accounting to Owner's Representative.

**CONTRACT CLOSE-OUT**  
**Section 01700**

1. Statement shall reflect all adjustments to the Contract Sum, including:
    - a. The original Contract Sum.
    - b. Additions and deductions resulting from:
      - Previous Change Orders.
      - Allowances
      - Unit Prices
      - iv. Deductions for non-corrected work
      - v. Penalties and Bonuses
      - vi. Deductions for Liquidated Damages
      - vii. Deductions for Re-inspection Payments
      - viii. Other adjustments
  2. Total Contract Sum, as adjusted.
  3. Previous Payments
  4. Sum Remaining Due
- B. Owner's Representative will prepare a Final Change Order reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.07— Final Application for Payment:

- A. Contractor shall submit the Final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

End of Section

**SPECIAL SURFACING**  
**Section 02550**

**Part 1— General:**

1.01 General:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions, Special Conditions, and related parts of the Technical Specifications apply to the work of this section.

1.02 — Section Includes:

- A. Repair of Existing Athletic Court Bituminous Concrete Surfaces
- B. Color Sport Surfacing of Athletic Courts

1.03 — Related Sections:

- A. Sections
  - 01340 "Shop Drawings, Product Data, and Samples"
  - 01400 "Quality Control"
  - 01500 "Construction Facilities and Temporary Controls"
  - 01600 "Materials"

1.04 —Submittals:

- A. Contractor shall submit all product data under provisions of Section 01340.
- B. Contractor shall submit color samples of color sport surface finish coat to clearly demonstrate range of color for approval by Owner's Representative.
- C. Contractor shall submit product data of Patching Product, Filler Coat, Finish Coat, and textured line paint for review by Owner's Representative.

1.05— Quality Assurance:

- A. All work shall conform to all local, state, and federal regulations along with the current material testing guidelines as published by the American Society of Testing and Materials (ASTM).
- B. All work shall be completed in accordance with American Sports Builders Association (ASBA) guide specifications.

**SPECIAL SURFACING**  
**Section 02550**

**Part 2 — Products:**

2.01 Patch Binder Mix:

- A. Core Patch Binder Mix: "Novabond" acrylic polymer emulsion (as manufactured by NOVA Sports USA, or approved equal), mixed with Portland Cement and Sand, in accordance with manufacturer's specifications, to create Patch Binder Mix.

2.02— Acrylic Patching Compound:

- A. "Novabond" acrylic polymer emulsion (as manufactured by NOVA Sports USA), or approved equal, mixed with Portland Cement and Sand, in accordance with manufacturer's specifications, to create leveling slurry.

2.03 — Cracinepair Membrane:

- A. "Armor Crack Repair System", or approved equal (Armor Crack Repair Tel: 877-9927667, [ArmorCrackRepair.com](http://ArmorCrackRepair.com)).

2.04— Filler Coat:

- A. "Novasurface Acrylic Resurfacer" (as manufactured by NOVA Sports USA), or approved equal, diluted and mixed with added sand in accordance with Manufacturer's Specifications. •

2.05— Finish Color Coating:

- A. "Novaplay" (as manufactured by NOVA Sports USA), or approved equal. Color Choice to be by owner. Submit Color Samples for review by Owner's Representative.

2.06 —Textured Line Paint:

- A. 2-part paint system consisting of a primer and finish coat. Primer to be "Seal-A-Line" (as manufactured by NOVA Sports USA), or approved equal. Finish Coat to be "Novatex" textured line paint (as manufactured by NOVA Sports USA), or approved equal — color to be white.

**Part 3- Execution:**

3.01 Existing Bituminous Concrete Repair:

**SPECIAL SURFACING**  
**Section 02550**

- A. All Existing Bituminous Concrete surfaces to be repaired shall be cleaned thoroughly, using high-powered air blowers and/or power brooms.
- B. Route and Clean out all cracks to greatest extent possible to remove debris, sand, dust, and organic matter.
- C. Fill Cracks with processed gravel to within N" of pavement surface (or as specified by manufacturer of Patch Binder mix).
- D. Mix Patch Binder Mix (Acrylic Polymer Emulsion, mixed with Portland Cement and Sand) in accordance with manufacturer's specifications.
- E. Prime area to be patched prior to application of patch binder mix, in accordance with patch binder mix manufacturer's specifications.
- F. Apply Patch Binder Mix in accordance with manufacturer's specifications, and trowel smooth to surface of adjacent bituminous concrete.

G. Structural Crack Repair:

- 1. This applies to Cracks that are Full Depth to the existing Bituminous Concrete Surfacing, as well as at seams between new Bituminous Concrete Patches and Existing abutting Bituminous Concrete Surfacing.
- 2. Following application of Patch Binder Mix and once it has cured, sand crack repair to levels in accordance with crack repair membrane manufacturer's specifications and apply crack repair membrane system in accordance with crack repair membrane manufacturer's specifications.

H. Low Spot Repair:

- 1. Allow any new Bituminous Concrete to Cure for a Minimum of 14 days.
- 2. Flood area with water and allow to dry while observing where water ponds.
- 3. Thoroughly clean surface free of all grease, oil, dirt, and any other foreign matter by washing with a high pressure water hose or blow clean with an air broom. Remove any grease or oil with an oil and grease emulsifier and then flush thoroughly with water.
- 4. Install acrylic patching compound in accordance with manufacturer's specifications to eliminate ponding conditions.

**SPECIAL SURFACING**  
**Section 02550**

3.02— Inspection:

- A. Contractor to verify site is dry and ready to support special surfaces and imposed loads.
- B. All new asphalt pavement shall cure for a minimum of 14 days prior to application of any surfacing materials.
- C. Contractor to verify that gradients and elevations of base are correct.
- D. Beginning of installation by Contractor means acceptance of base by Contractor. 3.03—

Preparation (General):

- A. Thoroughly Clean pavement to receive surfacing materials.
- B. Surfacing materials shall only be installed when temperatures and weather conditions meet the manufacturer's specified conditions.
- C. Protect areas that are not specified to receive color sport surfacing. 3.04—

Color Sports Surfacing Installation:

- A. Each coat of the color sports surfacing system shall be completely dry before next application. Between each coat, inspect entire surface and repair any defects.
- B. Apply a minimum of one (1) coat of Filler Coat, in accordance with Manufacturer's Specifications
- C. Apply two (2) coats of Finish Color Coating in accordance with Manufacturer's Specifications. Allow each application to dry thoroughly before applying next application.
- D. Layout and Mask Basketball Court Lines as indicated in Contract Drawings. Apply Line Paint Primer in accordance with Manufacturer's Specifications and allow to dry. Following full Drying of Primer, paint finish coat line paint in accordance with Manufacturer's Specifications and allow to dry fully. Following full Drying of Line Paint, remove masking immediately.

**End of Section**

**SITE FURNISHINGS**  
**Section 02760**

**Part 1— General:**

1.01 — Related Documents:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions, Special Conditions, and related parts of the Technical Specifications apply to the work of this section.
- B. Applicable portions of these Specifications, including, but not necessarily limited to:  
  
Section 01340 "Shop Drawings, Product Data and Samples"

1.02 —Section Includes:

- A. Basketball Backboards
- B. Basketball Backboard Retrofit Clamps
- C. Basketball Goals and Nets

1.03 —Submittals:

- A. Submit manufacturers' product data and written installation instructions for all site furnishings and structures.
- B. Submit color & material samples for all Site Furnishings and Structures.
- C. Approved products of equivalent or greater quality may be acceptable.

**Part 2— Products:**

2.01 — Basketball Backboards:

- A. Four (4), 48" x 72" clear polycarbonate perforated backboards, Model #XL7048, as manufactured by Truebounce Inc., or approved equal. Playing surface to be clear, trim color by owner. Backboards shall be treated with UV inhibitors, constructed of solid aluminum rust proof frame and stainless steel fasteners. They shall be shatterproof and sound/wind resistant with a graffiti and scratch resistant coating.

TrueBounce Inc.  
56 Conduit Street  
New Bedford, MA 02745  
Phone: (508)-999-3020

**SITE FURNISHINGS**  
**Section 02760**

2.02 — Basketball Backboard Retrofit Clamps:

- A. Four (4) 5-<sup>9</sup>/<sub>16</sub>" Gooseneck Clamps suitable for attachment of diagonal supports and connection to existing poles, Item #KT005, as available through TrueBounce Inc., or approved equal.

TrueBounce Inc.  
56 Conduit Street  
New Bedford, MA 02745  
Phone: (508)-999-3020

2.03— Basketball Goals and Nets:

- A. Four (4) heavy duty institutional breakaway goals with nets, model #RB1000, as available through TrueBounce Inc., or approved equal. Goals shall be powder coated finish and come with no-tie ring. Goals shall meet NCAA and NFSHSA Specifications. Goals shall include all necessary mounting hardware and heavy duty nylon net:

TrueBounce Inc.  
56 Conduit Street  
New Bedford, MA 02745  
Phone: (508)-999-3020

**Part 3 — Execution:**

3.01— General:

- A. Contractor shall field stake and label locations of all site furnishings as shown on the Drawings. Adjust as directed by the Owner's Representative. Re-field stake and label locations as necessary.
- B. All work shall be done by experienced workers.
- C. Contractor shall set units true and plumb. Perform final adjustments as required for use.
- D. All Site Furnishings and Prefabricated Structures shall be anchored appropriately by the Contractor. Install anchoring per manufacturer's recommendations for this geographic area. Manufacturer's recommendations must be approved in writing by the Owner's Representative prior to installation.

**SITE FURNISHINGS**  
**Section 02760**

Backboards shall be installed by Contractor true level to proper elevation and in accordance with manufacturer's specifications.

- F. Touch-up of finishes shall be required to the approval of the Owner's Representative. If an excessive amount of touch-up is required due to the Contractor's handling, the entire unit shall be refinished at no additional cost to the Owner.

End of Section