AGREEMENT BETWEEN OWNER
and
CONTRACTOR

This form is to be used for Design-Bid-Build projects only.
It is not approved for use in alternative methods projects
(Construction Manager at Risk and Design Build and Job Order Contracting).

________________________________________

ASU PROJECT NUMBER
ASU PROJECT NAME
Date

________________________________________

OWNER
ARIZONA BOARD OF REGENTS
FOR AND ON BEHALF OF
ARIZONA STATE UNIVERSITY

________________________________________

CONTRACTOR

________________________________________

________________________________________

________________________________________

DESIGN PROFESSIONAL

________________________________________

________________________________________

________________________________________

• OWNER & CONTRACTOR - CONSTRUCTION AGREEMENT
ARIZONA BOARD OF REGENTS TRI-UNIVERSITY MASTER CONTRACTS
• DECEMBER 2005 EDITION •
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AGREEMENT BETWEEN OWNER
and
CONTRACTOR

THIS AGREEMENT is entered into as of this _______ day of ____________, 20__, by and between the Arizona Board of Regents, a body corporate, for and on behalf of Arizona State University (hereinafter "Owner") and ____________________________ ("Contractor"). The terms of this Agreement are to be construed consistently with the other Contract Documents enumerated in Section 1 of the General Conditions of the Construction Agreement.

In consideration of the mutual promises of the parties, the Owner and the Contractor agree as follows:

1. THE WORK: The Contractor shall furnish all labor, materials, equipment, supplies and other items necessary to perform the Work for the Project described as: ____________________________________________ located at the following site: ____________________________________________ in strict accordance with the Drawings and Specifications prepared by ____________________________ ("Design Professional" or "DP") and all other Contract Documents.

2. CONTRACT TIME: The Contractor shall commence the Work only if and when directed in a written Notice to Proceed signed by the Owner. The work shall commence no later than _________________. Substantial Completion, as defined herein, shall be achieved _________________. In view of the difficulty or impossibility of determining the Owner's damages from delay, should the Contractor fail to achieve Substantial Completion by that date, as extended by any Change Orders, the Contractor agrees to pay and will pay to Owner, in addition to all other sums pursuant to the Contract Documents, the sum of $_______ for each calendar day of delay as liquidated damages for such delay and not as a penalty. This sum may be withheld from the balance of the Contract Price as it becomes due. Should liquidated damages exceed the Contract Price due or to become due, then the Contractor shall pay the Owner the difference within 3 days of receipt of written demand.

3. CONTRACT PRICE: Subject to increases and decreases for Change Orders in accordance with the Contract Documents, the Owner shall pay to the Contractor the following Contract Price, in progress payments as provided in the Contract Documents: ____________________________.

4. SUPPLEMENTAL TERMS AND CONDITIONS: The following supplemental terms and conditions and/or documents are part of this Agreement:

A. General Conditions of the Construction Agreement, dated ____________________________.

B. ____________________________.

C. ____________________________.

D. ____________________________.

E. ____________________________.

F. ____________________________.

G. ____________________________.
CONTRACTOR

__________________________________________

By: ______________________________________
Name: ________________________________ (Printed)
Title: ________________________________
Date: ________________________________

OWNER

ARIZONA BOARD OF REGENTS
for on behalf of
ARIZONA STATE UNIVERSITY

__________________________________________

By: ______________________________________
Name: ________________________________ (Printed)
Title: ________________________________
Date: ________________________________
SECTION 1. GENERAL DEFINITIONS

1.1 “Addenda” means clarifications or changes in the Work provided to bidders in writing prior to the public bid on the Contract.

1.2 “Contract Documents” or “Contract” means the Construction Agreement Between Owner and Contractor, the General Conditions of the Construction Agreement, any Supplemental Conditions of the Construction Agreement, the Drawings, the Specifications, the Performance and Payment Bonds, the Project Manual, Addenda and Modifications.

1.3 “Date of Substantial Completion” shall be the date certified by the Design Professional to the Owner that the work is in the Condition defined herein as substantial completion.

1.4 “Day” means calendar day unless specifically otherwise provided herein or by law.

1.5 “Design Professional” (DP) is that individual, partnership, or other legal entity defined in section 3.1 herein.

1.6 “Modifications” means Change Orders signed by the Owner, or other written amendments signed by both the Owner and the Contractor at or after the execution of the Contract, or the DP’s written interpretations or directions for minor changes in the Work. A ‘minor change’ is defined as one having no impact on cost or time or the Owner’s approved design intent, as determined by the Owner.

1.7 “Project” means all components of the improvements to be constructed for the Owner, regardless of whether the Work is all or only a part.

1.8 “Project Manual” means the written volume so titled which includes the bid documents, sample forms, specifications, and description of the project.

1.9 “Substantial Completion” means the Contractor’s work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the work or designated portion thereof for the use for which it is intended.

1.10 “Work” consists of all labor (including supervision), materials, equipment, supplies and other items reasonably required to construct all or a portion of the Project according to the Contract Documents.

SECTION 2. INTENT

2.1 The Contract represents the entire and integrated agreement between the Owner and the Contractor, and it supersedes all prior oral or written negotiations, representations or agreements. The Contract may only be changed by written modifications, and the Contractor understands and agrees that if the Contractor proceeds with any work upon verbal request only, Contractor is agreeing by his conduct that such work, or change in the work, constitutes a minor change.

2.2 The Contract Documents are to include all items reasonably necessary to construct the Work, expressly or by inference. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

2.3 The organization of the Specifications into divisions, sections, and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Sub-contractors or in establishing the extent of Work to be performed by any trade.
2.4 Generally, the Drawings indicate dimensions, positions and details of construction; the Specifications establish criteria and quality for materials and standards for workmanship. All Work shall be performed in a workmanlike manner and all materials used shall be new and of the highest quality and of the type best adapted to their purpose unless otherwise specified.

SECTION 3. DESIGN PROFESSIONAL (DP)

3.1 The DP is the individual or legal entity defined in the Contract Documents and/or otherwise designated by the Owner who is retained by the Owner to design and/or oversee the Project. For purposes of this Contract only, the term also includes individuals employed by any state university who render such services in connection with the Project.

3.2 The DP shall have the right, responsibility and authority to carry out the specific duties required of the DP, as described herein and in the contract between the DP and the Owner, including any amendments thereto. Any such amendments shall be in writing and furnished to the Contractor.

3.3 The DP will visit the site as it is deemed by the DP or Owner to be appropriate in order to advise the Owner as to the quality and progress of the construction. The Contractor shall cooperate with the DP in all respects in this regard, including attending meetings as requested.

3.4 The DP will be the initial interpreter of the requirements of the Contract Documents. The DP shall render written interpretations with reasonable promptness following a written request from the Owner or the Contractor. These interpretations shall be consistent with the intent of the Contract Documents.

3.5 Any claims or controversies between the Owner and the Contractor may be referred in writing to the DP for a written determination.

3.6 Any disagreements with the DP’s interpretations or determinations must be timely submitted and resolved in accordance with Arizona Board of Regents Policy 3-809(C), as amended or superseded, which shall be the parties' sole remedy. A current copy of the said policy has been made available to the Contractor.

3.7 The DP will review and approve or take other appropriate action upon the Contractor's submittals, such as Shop Drawings, Product Data and Samples, for conformance with the Contract Documents. Such action shall be taken with reasonable promptness as specified so as to cause no delay. The DP's approval of a specific item or component shall not indicate approval of an assembly of which the item is a component.

3.8 Following consultation with the Owner, the DP will take appropriate action on Change Orders and may authorize minor changes in the Work as defined in Section 1.6.

3.9 The DP and Owner will each have the authority to reject work which does not conform to the Contract documents and to require special inspection or testing but will take such action only after consultation with the other. However, neither the authority to act given to the DP and the Owner under this subparagraph nor any decision made by them in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility by them to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the work.

3.10 Based on the DP's observations, evaluation of applications for payment and consultation with the Owner, the DP will determine the amount owing the Contractor and will issue certificates for payment.

SECTION 4. CONTRACTOR

4.1 The Contractor is the individual or legal entity identified in the Contract Documents who is licensed to perform the Work under the laws of the State of Arizona. The Contractor shall only use duly licensed Subcontractors in connection with the Work, subject to the provisions for Owner approval contained in the Contract Documents.
4.2 The Contractor and his work force must comply with University parking and traffic regulations. Temporary permits shall be obtained from the campus police department and properly displayed on each vehicle, and vehicles must be operated and parked in conformance with the regulations. Citations and fines are the Contractor's responsibility.

4.3 If the Owner furnishes keys to the Contractor to provide access to University owned property, the Contractor shall assure that no such keys are duplicated, and shall return all such keys upon request of the Owner or prior to receipt of final payment, whichever is earlier. If the Contractor fails to return all keys furnished to it, the Contractor shall be responsible for and shall pay all costs (including materials and labor of University personnel or others) associated with rekeying (removal of tumblers and insertion of new tumblers) or replacement of old locks which could be opened with keys furnished to the Contractor, and the parties agree that such cost may be deducted in full or in part from any retainage remaining to be paid under the terms of this Contract with any balance due immediately from Contractor to Owner.

SECTION 5. OTHER CONTRACTORS AND COOPERATION

5.1 The Owner reserves the right to award other contracts related to the Project, or to perform certain work itself. Such other work may or may not be known to the Owner or disclosed to the Contractor prior to bidding this project. The Contractor shall afford the Owner and other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly coordinate its Work with theirs in such manner as the DP may direct. The Contractor shall also assure at its own cost reasonable access of other contractors to the site and their work.

5.2 Upon request of the Contractor, the DP or Owner will provide the Contractor with a copy of all plans, specifications, schedules and other data relating to other contracts or work. The Contractor shall thoroughly examine these documents and shall within three (3) days of completing such examination notify the DP in writing of any conflicts with the Work to be performed by the Contractor. In no event shall such notice be given so late as to interfere with or delay the work to be performed by the Contractor. Failure of the Contractor to request, review, or provide written notice as provided above shall constitute a waiver of any objections or claims the Contractor may have as a result of the necessity to coordinate the Contractor's work with other activities.

5.3 Should the Contractor sustain any damage through any act or omission of any other contractor, Contractor shall have no claim or cause of action against the Owner for such damage and hereby waives any such claim. The Contractor does not waive any claim or cause of action against any other contractor or subcontractor to recover any and all damages sustained by reason of the acts or omissions of such other contractor. The phrase "acts or omissions" as used in this section shall be defined to include, but not be limited to, any reasonable delay on the part of any such other contractor, whether due to negligence, gross negligence, inadvertence or any other cause.

5.4 Should the Contractor cause damage to the work or property of any other contractor or of the Owner, the Contractor shall upon receiving due notice promptly attempt to settle with such other contractor by agreement, repair or otherwise to resolve the dispute. If such separate contractor sues or initiates a proceeding against the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall defend such proceedings, and if any judgment or award against the Owner arises therefrom the Contractor shall pay or satisfy it and shall reimburse the Owner for all attorney's fees and court or other costs which the Owner has incurred.

SECTION 6. SITE CONDITIONS AND ENVIRONMENTAL MATTERS

6.1 The Contractor shall thoroughly acquaint himself with all available information concerning the conditions of the Work and is responsible for correctly and fully estimating the difficulty and cost of successfully performing the Work.

6.2 The Contractor agrees that it has thoroughly examined the site, plans and specifications, boring data and all other soils information and as-built data made available and by submission of the bid herein avows that it has satisfied itself as to the character, quality and quantity of surface and subsurface materials or existing obstacles to be encountered. The Contractor acknowledges that boring data and other soils information and as-built data made available is only a general indication of materials and/or conditions likely to be found adjacent to holes bored or in
existing structures or facilities or other areas. If the Contractor determines that the information is erroneous, inadequate or ambiguous, it shall immediately report its conclusions to the DP and the Owner in writing. If the Contractor determines that the information is erroneous, inadequate, or ambiguous, and after reporting its conclusions to the Owner, remains dissatisfied or uninformed, the Contractor shall refrain from submitting a bid, or if the Contractor does submit a bid, the Contractor shall be deemed to have waived any claim it may have as the result of the alleged erroneous, inadequate or ambiguous information.

6.3 The Contractor shall immediately, and before such conditions are disturbed, notify the DP and the Owner in writing of:

A. Subsurface or latent physical conditions encountered at the site which differ materially from those indicated in the Contract and which were not known by the Contractor or could not have been discovered by careful examination and investigation of the information available at bid time and which could adversely affect the timely performance of the Work or its cost; or

B. Unknown and unexpected physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered in the locale or generally recognized as inherent in Work of the character provided for in the Contract.

6.4 The DP and/or the Owner shall within ten (10) days, or such other reasonable time as necessary, investigate the conditions discovered. If the DP and/or the Owner find that conditions are so materially different as to support an equitable adjustment in the Contract Price or the Contract Time, this will be done by written Change Order. If the DP and/or the Owner determine that no Change Order will be issued, the Contractor shall continue with the Work at no additional cost and under no change in Contract Time.

6.5 No claim by the Contractor for an increase in the Contract Price or Contract Time hereunder shall be allowed without proper advance notice and an adequate opportunity for the Owner to investigate.

6.6 Environmental Matters.

6.6.1 Contractor shall provide or cause to be provided a copy of this Section 6.6 to each Subcontractor and each Sub-subcontractor participating in the Work.

6.6.2 Definitions. The following terms will have their respective designated meanings:


“Hazardous Substance” means any of the following:

(i) any petroleum, oil, gasoline, kerosene, other petroleum product, flammable substance, volatile organic compound, volatile solvent, explosive, asbestos, polychlorinated biphenyl, dioxin, toxic herbicide or pesticide, radioactive material, radon gas and materials containing formaldehyde;
any material, substance or waste now or hereafter defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “extremely hazardous wastes,” “extremely hazardous substances,” “restricted hazardous wastes,” “toxic substances,” “regulated substances,” “solid wastes,” “pollutant,” or “contaminant” or words of similar import in any Environmental Law;

any other material, substance or waste now or hereafter classified or regulated as “hazardous” or “toxic” under any Environmental Law;

any material, substance or waste now or hereafter listed in the United States Department of Transportation Table (49 CFR 172.101) or classified by the United States Environmental Protection Agency as “hazardous” (40 CFR Part 302) or in any successor or replacement tables or classifications as in effect from time to time; and

any Hazardous Waste.

“Hazardous Waste” means “hazardous waste”, as defined in the Resource Conversation and Recovery Act of 1976 and the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) and any successor statutes and any regulations, rules or guidelines promulgated pursuant thereto as in effect from time to time (including, without limitation, any such waste resulting from removal of, demolition of, modifications of or additions to part or all of any existing structure, facility or equipment).

“Contractor Hazardous Waste” means any Hazardous Waste arising during or from the Work that is generated by the acts or omissions of Contractor, a Subcontractor or any Sub-subcontractor (including, without limitation, a Contractor Release) and that is not Owner Hazardous Waste.

“Owner Hazardous Waste” means Hazardous Waste (i) that consists of Hazardous Substances in any existing structure, facility or equipment on Owner’s property or otherwise present on Owner’s property at commencement of the Work, and (ii) that has become Hazardous Waste due to any part of the Work. However, Owner Hazardous Waste does not include any Hazardous Substance that has become a Hazardous Waste due to any Contractor Release.

“Project Hazardous Waste” means any Hazardous Waste arising on Owner’s property from the Work (including, without limitation, Contractor Hazardous Waste and Owner Hazardous Waste), regardless of:

(a) whether generated by the acts or omissions of Owner, Contractor, a Subcontractor or a Sub-subcontractor;

(b) whether it consists of Hazardous Substances that were on or in Owner’s property at commencement of the Work and that have become Hazardous Waste in the course of the Work; and

(c) whether it consists of Hazardous Substances that are brought on to Owner’s property for or during the Work by Contractor, a Subcontractor or a Sub-subcontractor and that have become Hazardous Waste in the course of the Work.

“OSHA” means the Federal Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.) and any successor statutes and any regulations, rules or guidelines promulgated pursuant thereto as in effect from time to time.

“Release” means any discharging, disposing, dumping, emitting, emptying, escaping, injecting, leaching, leaking, pouring, pumping, releasing, spilling, or similar action or event.

“Contractor Release” means a Release of a Hazardous Substance (including, without limitation, Hazardous Substances that were on or in Owner’s property at commencement of the Work) arising from acts or omissions of Contractor or any Subcontractor or Sub-subcontractor or their employees or workers. However, Contractor Release does not include Releases of pre-existing Hazardous Substances on Owner’s property of which Owner had not made Contractor aware and as to which Contractor, Subcontractors and Sub-subcontractors acted reasonably.
6.6.3 General Requirements.

6.6.3.1 Compliance with Environmental Law and OSHA. Contractor shall comply with, and shall cause all Subcontractors and Sub-subcontractors to comply with, this Section 6.6 and with all Environmental Law and OSHA applicable to (i) Contractor, (ii) Subcontractors, (iii) Sub-subcontractors, (iv) the Work and (v) all of their activities in respect of the Work.

6.6.3.2 Hazardous Substances.

(i) Hazardous Substances may be transported to and from and stored, used and be present on Owner’s property in such quantities as are generally recognized to be usual and customary for performance of the Work.

(ii) Hazardous Waste may be generated on Owner’s property of such kinds and in such quantities as are generally recognized to be usual and customary in connection with performance of the Work. Hazardous Waste so generated may be stored temporarily on Owner’s property.

(iii) Prior to final completion of the Work, Contractor shall remove or cause to be removed from Owner’s property and disposed of in accordance with Environmental Law and OSHA any Hazardous Substances (other than Project Hazardous Waste) brought onto Owner’s property during the Work or used in connection with the Work.

(iv) Other than as provided in (i), (ii) and (iii), Contractor shall not, and Contractor shall cause all Subcontractors and Sub-subcontractors to not, dispose of, generate, manufacture, process, produce, Release, treat or otherwise store, use or have in or on or transport to or from Owner’s property any Hazardous Substance, regardless of whether the Hazardous Substance is preexisting on Owner’s property or otherwise.

6.6.3.3 Releases of Hazardous Substances. Upon any Release of any Hazardous Substance in connection with the Work, whether relating to a pre-existing condition on Owner’s property (for example, arising from any demolition of, modification of, or addition to any structure, facility or equipment) or relating to acts or omissions of Contractor, a Subcontractor or a Sub-subcontractor, Contractor shall take any immediate action reasonably necessary to contain the Release. Owner may elect to have Contractor control and carry out any containment, clean-up, removal and remediation activity. Alternatively, Owner shall have the right to elect to control and carry out any containment, clean-up, removal and remediation activity. Regardless of who takes the actions, Contractor shall absorb, without reimbursement from Owner, all costs and expense incurred by Contractor in connection with any Contractor Release. In addition, Contractor shall pay or reimburse Owner for all costs and expenses incurred by Owner relating to any Contractor Release. If the amount is not paid promptly, Owner may offset the amount against any amount payable by Owner to Contractor under the Contract Documents or otherwise. Remediation, removal, and other cleanup action arising from any Release shall be in full compliance with Environmental Law and OSHA and shall be subject to approval by Owner. In addition, Owner may require remedial, removal or other cleanup action in excess of applicable minimum requirements of Environmental Law and OSHA (A) as reasonably necessary or appropriate in the judgment of Owner to permit human use and habitation of Owner’s property and to permit use of Owner’s property as a public university, and (B) as reasonably consistent in the judgment of Owner with such habitation and uses.

6.6.3.4 Hazardous Waste. Owner will arrange for handling, storage and disposal of any Project Hazardous Waste. On an interim basis until Owner can make arrangements, Contractor shall assure proper handling (including, without limitation, segregation from waste that is not Hazardous Waste) and storage of Project Hazardous Waste in full compliance with Environmental Law and OSHA. Contractor shall pay all of Owner’s expenses of storing, handling and disposing of Contractor Hazardous Waste. Owner will deliver a statement to Contractor showing Owner’s expenses, and Contractor will promptly pay such amount to Owner. If the amount is not paid promptly, Owner may offset the amount against any amount payable by Owner to Contractor under the Contract Documents.
6.6.4 **Notifications to Owner.** Contractor shall notify Owner’s Project Manager immediately upon occurrence of any of the following:

(i) any discovery by Contractor, a Subcontractor or any Sub-subcontractor of any Hazardous Substance in any existing structure, facility or equipment on Owner’s property.

(ii) any Release of any Hazardous Substance on Owner’s property in connection with the Work;

(iii) the creation or generation of any Hazardous Waste resulting from the Work (including, without limitation, Hazardous Waste arising from the removal of, demolition of, modification of, or addition to any existing structure, facility or equipment);

(iv) the need for any remediation or removal of any Hazardous Substance relating to the Work whether relating to a pre-existing condition on Owner’s property or to acts or omissions of Contractor, a Subcontractor or a Sub-subcontractor; or

(v) any claim, demand, inquiry, investigation, litigation or other action or proceeding by any governmental authority or other person relating to any Hazardous Substance, Hazardous Waste, Environmental Law or OSHA relating to the Work.

Except for immediate action to contain any Release of any Hazardous Substance and except for interim handling and storage of Project Hazardous Waste, Contractor shall not take any action as to any matter in (i), (ii), (iii), (iv) or (v) without the prior written approval of Owner and Owner shall have the right to elect to control and carry out any such action or matter.

6.6.5 **Existing Hazardous Substances.** The purpose of this **Section 6.6.5** is to deal with a limited number of particular conditions and requirements.

6.6.5.1 **Owner Designated Limited Work Areas.** Owner may elect to designate to Contractor specific limitations to the Work area. Whenever Owner does this, Contractor shall not, intentionally or accidentally or otherwise, scrape or otherwise disturb the surface of any walls, ceilings, floors or other surfaces or penetrate or otherwise access any walls, ceilings, floors, overheads or other areas adjacent to or outside the designated Work area unless Contractor has requested and obtained approval from Owner’s Project Manager. Any question about the scope of the Work area must be resolved by Owner’s Project Manager. Any Release of a Hazardous Substance resulting from any scraping, disturbance, penetration or other access outside the Work area will be a Contractor Release.

6.6.5.2 **Asbestos Contamination in Owner’s Utility Tunnel System.**

**THERE IS ASBESTOS CONTAMINATION IN OWNER’S UTILITY TUNNEL SYSTEM.**

A Restricted Access Provision for the Utility Tunnel System is in-place due to asbestos-contamination present in the tunnel floors. Settled dusts on utility lines may also contain asbestos. Signage is located at each tunnel entrance that warns of asbestos. Asbestos is classified as a known human carcinogen and U.S. Occupational Safety and Health Administration regulations are in-place to limit employees’ exposure to airborne asbestos fibers.

**CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL ENVIRONMENTAL LAW AND OSHA REQUIREMENTS RELATING TO EXPOSURE OF CONTRACTOR’S, SUBCONTRACTOR’S AND SUB-SUBCONTRACTOR’S EMPLOYEES AND OTHER WORKERS TO THIS ASBESTOS.**

6.6.5.3 **Other Asbestos.** Contractor and each Subcontractor and Sub-subcontractor to comply with all requirements of Environmental Law and OSHA concerning any other asbestos in the Work area.
6.6.5.4 Restriction on Use of Asbestos-Containing Materials. Except for asbestos-containing materials specifically approved by Owner as provided below, prior to Final Completion, the Contractor, must deliver to Owner a signed statement that "No asbestos-containing materials were used in the Work". If asbestos-containing material(s) must be used either for historical restoration or performance considerations, the Contractor must obtain Owner's approval before ordering the material. The Contractor will advise Owner's Project Manager and the Design Professional of this need. If Owner approves the asbestos containing material, Owner’s Project Manager will communicate this to Contractor and to Owner’s Facilities Management and Risk Management, including the appearance and type of material, location and purpose so that it can be managed long-term without incidence.

6.6.5.5 Waste Electric Light Bulbs. Owner voluntarily uses special handling and disposal procedures for all electric light bulbs. Accordingly, all waste electric light bulbs generated from the Work must be handled by Contractor in the following manner. Contractor shall provide labor and materials for proper packaging of the waste electric light bulbs. Owner’s Project Manager must approve in advance the method of packaging. The packaged waste electric light bulbs will be disposed of as Hazardous Waste as provided in Section 6.6.3.4.

6.6.5.6 PCBs. If polychlorinated biphenyl (PCB) containing ballasts, transformers and other electrical equipment are present in a Work area, these items must be handled by Contractor the following manner. Contractor shall provide labor and materials for proper packaging of these waste items. The Owner’s Project Manager must approve in advance the method of packaging. The packaged waste electric light bulbs will be disposed of as Hazardous Waste as provided in Section 6.6.3.4.

6.6.5.7 Lead-Based Paint. Existing building components that may be coated with lead-based paint may not be disposed of by Contractor as construction debris prior to being tested by Owner.

6.7 Construction Site Safety Requirements.

6.7.1 General. As between Contractor and Owner, Contractor shall have sole responsibility and liability for construction site safety. Without limiting other actions in this regard, Contractor shall, and shall cause each Subcontractor and Sub-subcontractor to, comply with worker health and safety requirements in Environmental Law and OSHA. In addition, Contractor shall take all reasonable necessary and appropriate steps to assure the health and safety of persons occupying any part of the facility in which the Work site is located or in the vicinity of or passing by the Work site and shall also take all reasonable necessary and appropriate steps to protect from damage or destruction the property of Owner and other persons in any part of the Facility in which the Work site is located or in the vicinity of or passing by the Work site. Among other actions in this regard Contractor shall comply with the requirements of the applicable fire code.

6.7.2 Environmental, Health and Safety Concerns by Contractor, Subcontractors or Sub-subcontractors. If in the course of the Work, any environmental, health or safety concern exists or arises, whether relating to a Hazardous Substance, OSHA or otherwise, then the Work activities related to the concern must be discontinued until the concern is resolved. This means prior to disturbing a suspected Hazardous Substance or otherwise interacting with a potential health or safety hazard. The Owner's Project Manager must be notified immediately of the concern. Work shall not resume until approval has been provided by Owner. Close coordination will be maintained between Owner and Contractor so the Project schedule is impacted the least amount possible.

6.8 Scope of Indemnity. The indemnity in Section 19 shall include any claim and Owner’s attorneys’ fees and other costs and expenses in defending any claim by any person that Owner is responsible or liable for any of the following arising from the acts or omissions of Contractor, any Subcontractor, any Sub-subcontractor or any of their employees or other workers relating to the Work: (i) any violation of Environmental Law or OSHA; (ii) any failure by Contractor, any Subcontractor or any Sub-subcontractor to perform or comply with any obligation or requirement in this Section 6, (iii) any Contractor Release of any Hazardous Substance; (iv) any improper disposition of any
Hazardous Substance or Hazardous Waste; (v) any claim by any employee, agent, independent contractor or other worker of Contractor, any Subcontractor or any Sub-subcontractor and any claim by any other person of personal injury, death or property damage arising from any Contractor Release of any Hazardous Substance or arising from any failure by Contractor, any Subcontractor or any Sub-subcontractor to comply with any Environmental Law or OSHA or this Section 6.

SECTION 7. DRAWINGS AND SPECIFICATIONS

7.1 The Contractor shall study and compare the Contract Documents sufficiently in advance of beginning each phase or portion of the work to be performed and immediately report any material error, inconsistency, conflict, ambiguity, or omission that is discovered.

7.2 The Drawings are intended to show general arrangements, design and extent of Work and are not intended to serve as Shop Drawings. Where required, the Contractor shall perform no portion of the Work without approved Shop Drawings, Product Data or Samples; any Work performed in violation of this provision will be solely at the Contractor’s risk regardless of DP’s and/or Owner’s knowledge of such Work.

7.3 In the event of any conflict or ambiguity, Contract Documents shall be interpreted as being complementary, requiring a complete project or designated portion thereof. In the event of conflict in the Contract Documents, the priorities stated below shall govern:

   A. Addenda shall govern over all other Contract Documents and subsequent addenda shall govern over prior addenda only to the extent modified.

   B. In case of conflict between plans and specifications, the specifications shall govern.

   C. Conflicts within the drawings:

      (1) Schedules, when identified as such, shall govern over all other portions of the drawings.

      (2) Specific notes shall govern over all other notes and all other portions of the drawings, except the schedules described in 7.3(c)(1) above.

      (3) Larger scale drawings shall govern over smaller scale drawings.

      (4) Figured or numerical dimensions shall govern over dimensions obtained by scaling.

   D. Conflicts within the specifications: Contract General Conditions shall govern over all sections of the specifications except for specific Modifications thereto that may be stated in Supplementary General Conditions or addenda. No other section of the specifications shall modify the Contract General Conditions.

   E. In the event provisions of codes, safety orders, Contract Documents, referenced manufacturer’s specifications or industry standards are in conflict, the more restrictive or higher quality shall govern.

   F. In the event of any conflict, the Contractor shall request an interpretation by the DP before performing the Work.

7.4 If the Contract Documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, or materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail shall be deemed to be an implied requirement of the Contract Documents in accordance with such standard.

'Minor detail' shall include the concept of substantially identical components, where the price of each such component is small even through the aggregate cost or importance is substantial, and shall include a single component which is incidental, even though its cost or importance may be substantial.
The quality and quantity of the parts or material so supplied shall conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts of materials otherwise set forth in the Contract Documents.

SECTION 8. SUBMITTALS, DRAWINGS AND SHOP DRAWINGS

8.1 The Contractor shall maintain at the site, for the use of the Owner and of the DP, one copy of all Drawings, Specifications, bulletins, addenda, Change Orders, field orders, approved Shop Drawings, approved Submittals, supplementary instructions, requests for information, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, guarantees and other contract related documents and their Modifications, if any, in good order and marked daily by the Contractor to record all approved changes made during construction. These shall be turned over to the DP by the Contractor at the time of Substantial Completion for the purpose of assembling and correlating the material for use by the Owner.

8.2 The Contractor shall submit to the DP, with such promptness as to cause no delay in its Work or in that of any other Contractor, all Submittals and Shop Drawings as required by the Contract Documents, or as necessary to illustrate details of the Work.

8.3 Each Submittal and Shop Drawing must be accompanied by a transmittal letter containing a list of the titles and numbers of the Shop Drawings. Each series shall be numbered consecutively for ready reference and each Submittal and Shop Drawing shall be marked with the following information:

A. Date of Submission  
B. Name of Project  
C. Location of Project  
D. Branch of Work (Specification Section)  
E. Project Number  
F. Name of Submitting Contractor  
G. Name of Subcontractors  
H. Revision Number

8.4 All Subcontractor Submittals and Shop Drawings shall be submitted to the DP by the Contractor and shall bear written approval by the Contractor. Any Submittals or Shop Drawings submitted without this approval will be returned for resubmission; the Submittals or Shop Drawings will be considered as not having been submitted, and any delay caused thereby shall be the Contractor's sole responsibility.

8.5 The Contractor shall include with Submittals and Shop Drawings, a letter indicating all deviations from the DP's Drawings and Specifications. Failure to so notify the DP of such deviations will be grounds for subsequent rejection of the related Work or materials. If, in the opinion of the DP, the deviations are not acceptable, the Contractor will be required to furnish the item as specified or as indicated on the DP's Drawings.

8.6 It is the Contractor's obligation and responsibility to check all of its Submittals and Shop Drawings and to be fully responsible for them and for coordination with connecting Work. Submittals and Shop Drawings shall indicate in detail all parts of an item of work, including erection and setting instructions and engagements with Work of other trades or other separate contractors.

8.7 By approving or submitting Submittals and/or Shop Drawings, the Contractor thereby represents that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that it has checked and coordinated each Submittal and/or Shop Drawing with the requirements of the Work and of the Contract Documents. If any specified material item or part is not available, the Contractor shall so indicate to the DP.

8.8 The DP shall review Submittals and Shop Drawings and return them to the Contractor within twenty (20) days of receipt unless otherwise previously agreed in writing. For scheduling purposes, the Contractor must assume a 20-day review period for each Submittal or set of Shop Drawings. For complex Submittals, the Contractor must assume two 20-day review cycles. If review and approval are delayed beyond twenty (20) days, the DP shall
notify the Contractor and the Owner in writing stating the reason for the delay. Approval shall not relieve the Contractor from the responsibility for deviations from the drawings and specifications, unless it has been called to the DP's attention, in writing, at the time of submission. Any Modification will be approved only if it is in the interest of the Owner to effect an improvement in the Work and does not increase the Contract Price or Contract Time. Any such Modification is subject generally to all other provisions of the Contract Documents, and is without prejudice to any and all rights under any surety bond.

8.9 If the DP returns a Submittal or Shop Drawing to the Contractor with the notation rejected, “revise,” and resubmit, or “approved as noted,” the Contractor, so as not to delay the Work, shall promptly submit a Submittal or Shop Drawing conforming to the requirements of the Contract Documents and indicating in writing on the Submittal or Shop Drawing and on the transmittal what portions of the resubmittal have been altered in order to meet with the approval of the DP. Any other differences between the resubmittal and the prior submittal shall also be indicated on the Shop Drawing and on the resubmittal as a special note.

8.10 No extension of time will be granted to the Contractor because of its failure to submit Submittals or Shop Drawings in ample time to allow for review, possible resubmittals and approval. Fabrication of Work shall not commence until the Contractor has received written approval. The Contractor shall furnish prints of its approved Submittals and Shop Drawings to all the Contractors whose work is in any way related to the Work. Only prints bearing this approval will be allowed on the site.

SECTION 9. PRODUCT SAMPLES, TESTS, AND CERTIFICATES

9.1 The Contractor shall furnish Product Samples of all items requested or required by the Specifications. Product Samples shall be properly identified and submitted with such promptness as to cause no delay in Work or in the work of any other contractor and to allow time for consideration by the DP and the Owner. The DP and/or Owner will review Product Samples in accordance with Sections 8.8 - 8.10 above.

9.2 Each Product Sample must be accompanied by a letter of transmittal containing the following information:

A. Date of Submission
B. Name of Project
C. Location of Project
D. Branch of Work (Specification Section Number)
E. Project Number
F. Name of Submitting Contractor
G. Name of Subcontractor

9.3 The Contractor shall furnish to the DP a certificate stating that material or equipment submitted complies with Contract Documents. If a certificate originates with the manufacturer, the Contractor shall endorse it and submit it to the DP together with a statement of compliance in its own name.

9.4 No tests, inspections or approvals performed or given by the Owner or the DP or others acting for the Owner or any agency of Federal, State or Local government nor any acts or omissions by the Owner or the DP in administering this Contract shall relieve the Contractor from its duty to perform the Work in accordance with the Contract Documents and applicable law.

9.5 Unless the DP is authorized at the time of submittal to return samples at the Contractor's expense, rejected samples will be destroyed.

9.6 After delivery of materials, the DP may make such tests as it deems necessary, with samples required for such tests being furnished by and at the cost of the Contractor. Any test is for the benefit of the Owner and shall not relieve Contractor of the responsibility for providing quality control measures to assure that Work strictly complies with the Contract Documents. No test shall be construed as implying acceptance of materials, work, workmanship, equipment, accessories or any other item or thing.

9.7 On the basis of the test results, materials, workmanship, equipment or accessories may be rejected even though general approval has been given. If items have been incorporated in Work, the DP shall have the right to
cause their removal and replacement by items meeting Contract Document requirements or to demand and secure appropriate reparation to the Owner from the Contractor.

SECTION 10. AS-BUILT DRAWINGS

10.1 Prior to Substantial Completion, the Contractor shall complete and turn over to the DP the As-Built Drawings. The As-built Drawings shall consist of a set of drawings which indicate all field changes that were made to adapt to field conditions, changes resulting from contract Change Orders and all buried and concealed installation of piping, conduit and utility services. All buried and concealed items both inside and outside the facility shall be accurately located on the As-Built Drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The As-Built Drawings shall be clean and all changes, corrections and dimensions shall be given in a neat and legible manner in a contrasting color.

10.2 For any changes or corrections in the Work which are made subsequent to Substantial Completion, revisions shall be submitted to the DP prior to Final Payment.

SECTION 11. SUPERINTENDENCE BY THE CONTRACTOR

11.1 The Contractor shall have a competent superintendent on the site at all times during the progress of the Work. Contractor's superintendent must be acceptable to the Owner. The superintendent shall have such assistants with such individual specialized competencies including, but not limited to, CPM scheduling, as may be necessary to fully understand and oversee all aspects of the Work. The superintendent and his assistants all shall be physically fit for their Work and capable of going to all locations where Work is being performed. A communication to the superintendent or his designated assistants by the Owner or DP is binding upon the Contractor. The Contractor's superintendent shall be responsible for the prevention of accidents at the site. The Commercial Construction Safety Code of the Arizona Industrial Commission shall apply to all Work, and a copy of the Code shall be available at the site.

11.2 The Contractor shall at all times enforce strict discipline and good order among the workers on the Project and shall not employ or continue to employ any unfit person on the Project or any person not skilled in the work assigned to him. The Contractor shall be responsible to the Owner for all acts and omissions of its employees, Subcontractors, Suppliers, anyone whom the Contractor may allow to perform or inspect or supervise any Work, and their agents and employees together with anyone whom the Contractor may allow to come on the Project site. In addition, if the Contractor receives written notice from the Owner to dismiss those subcontractors or employees or one who is a hindrance to proper or timely execution of the Work, the Contractor shall dismiss those employees and agrees to replace those dismissed without delay to the Project and at no additional cost to the Owner.

11.3 The Contractor shall competently and thoroughly direct and superintend all of the Work and shall be solely responsible for all construction safety, means, methods, techniques, sequences and procedures. It shall coordinate and schedule all Work under this contract, the performance of all its employees, Subcontractors, and Suppliers, and the timely procurement of all necessary labor, materials, equipment, supplies, and all else needed to do the Work.

SECTION 12. NONDISCRIMINATION - GOVERNOR'S EXECUTIVE ORDER 99-4 (amending 75-5)

12.1 In connection with the performance of Work under this contract, the Contractor agrees to observe Arizona Executive Order 99-4 and all applicable Arizona and Federal Law. Contractor further agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin or disability, except to the extent such discrimination is not prohibited by pertinent State or Federal law or Executive Order. In addition, the Contractor agrees to actively recruit in accordance with any affirmative action programs applicable to Contractor. The aforesaid provisions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available for employees and applicants for employment, notices to be provided by the Owner, setting forth the provisions of this nondiscrimination clause and shall insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

The text of the Arizona Governor’s Executive Order 99-4 follows:
PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS NONDISCRIMINATION IN EMPLOYMENT BY GOVERNMENT CONTRACTORS AND SUBCONTRACTORS

PART I: Nondiscrimination in employment by government contractors and subcontractors. All government contracting agencies shall include in every government contract hereinafter entered into the following provisions: During the performance of this contract, the contractor agrees as follows:

A. The contractor will not discriminate against any employee or applicant for employment because of race, age, color, religion, sex, sexual orientation or national origin. The contractor will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, age, color, religion, sex, sexual orientation or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

A continued Executive Order No. 75-5 is hereby amended to permit government contractors and subcontractors that are religious organizations to provide employment preferences based upon religion when dealing with a bona fide occupational qualification reasonably necessary to the operation of the religious organization, in accordance with the requirements of Title 41, chapter 9, article 4, Arizona Revised Statutes.

Executive Order No. 75-5 prohibits all government contractors and subcontractors for discriminating against any employee or applicant for employment because of race, age, color, religion, sex, sexual orientation or national origin. Executive Order No. 75-5 further requires all government contractors and subcontractors to take affirmative action to insure that applicants are employed and employees are treated during employment without regard to their race, age, color, religion, sex, sexual orientation or national origin.

Arizona’s Civil Rights Act, Title 41, chapter 9, article 4, does not apply to religious organizations with respect to the employment of individuals of a particular religion to perform work connected with the activities of the employer. It also provides that religious organizations may provide employment preferences based upon a religion when dealing with a bona fide occupational qualification reasonable necessary to the operation of the religious organization. This is consistent with the provisions of the Civil Rights Act of 1964 (42 U.S.C. 2000e, et seq.). In addition, in the Personal Responsibility and Work Opportunity Reconciliation Act, P.L. 104-193, Congress provided that religious organizations are eligible for the receipt of federal funds on the same basis as other private organizations.

B. The contractor will in all solicitations or advertisement for employees placed by or on behalf of the contractor state that all qualified applicants will receive consideration for employment without regard to race, age, color, religion, sex, sexual orientation or national origin.

C. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided by the agency contracting officer advising the labor union or workers’ representative of the contractor's commitments under this Executive Order and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. The contractor will furnish all information and reports required by the contracting agency and will permit access to his books, records and accounts by the contracting agency and the Civil Rights Division for purposes of investigation to ascertain compliance with such rules, regulations and orders.

E. In the event of the contractor's noncompliance with the non-discrimination clauses of the contract or
with any of such rules, regulations or orders of the Arizona Civil Rights Division said noncompliance will be considered a material breach of the contract and this contract may be cancelled, terminated or suspended in whole or in part, and the contractor may be declared ineligible for future government contracts until such contractor has been found to be in compliance with the provisions of this order and the rules and regulations of the Arizona Civil Rights Division, and such sanctions may be imposed and remedies revoked as provided in Part II of this order, and the rules and regulations of the Arizona Civil Rights Division.

F. The contractor will include the provisions of paragraphs A through E in every subcontractor purchase order so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect in the subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the State of Arizona to enter into such litigation to protect the interests of the State of Arizona.

G. Each contractor having a contract containing the provisions prescribes in the section shall file and shall cause each of his subcontractors to file compliance reports with the contracting agency or the Civil Rights Division, as may be directed. Compliance reports shall be filed within such times and shall contain such information as the practices, policies, programs and employment policies, programs and employment statistics of the contractor and each subcontractor and shall be in such form as the Arizona Civil Rights Division may prescribe.

H. Bidders or prospective contractors or subcontractors shall be required to state whether they have participated in any previous contract subject to the provisions of this order or any preceding similar Executive Order and in the event to submit on behalf of themselves and the proposed subcontractors compliance reports prior to, or as in initial part of negotiation of a contract.

I. Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the compliance report shall include such information from such labor unions or agency practices and policies affecting compliance as the contracting agency or Civil Rights Division may prescribe; provided, that, to the extent such information is within the exclusive possession of labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify the contracting agency as part of its compliance report and shall set forth what efforts he has made to obtain such information.

J. The contracting agency or the Civil Rights Division shall require that the bidder or prospective contractor or subcontractor shall submit as part of his compliance report a statement in writing signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training with which the bidder or prospective contractor deals with supporting information to the effect that the signer's practices and policies do not discriminate on the ground of race, color, religion, sex, sexual orientation or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this order or that it consents and agrees that recruitment employment and the terms and conditions of employment under the proposed contract shall be in accordance with the purpose and provisions of this order. In the event that the union or the agency shall refuse to execute such a statement, the compliance shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the contracting agency or the Civil Rights Divisions may require.
rules and regulations and orders of the Civil Rights Division issued pursuant to this order. They are directed to cooperate with the Civil Rights Division and to furnish the Division such information and assistance as it may require in the performance and assistance of the Division’s functions under this order. They are further directed to appoint or designate from among the agency personnel compliance officers. It shall be the duty of such officers to first seek compliance with the objective of this order by conference, conciliation, mediation or persuasion.

B. The Civil Rights Division may investigate the employment practices of any government contractor or subcontractor or initiate such investigation by the appropriate contracting agency or determine whether or not the contractual provisions specified in this order have been violated. Such investigations shall be conducted in accordance with the procedures established by the Civil Rights Division and the investigating agencies shall report to the Civil Rights Division any action taken or recommended. The Civil Rights Division may receive and investigate or cause to be investigated complaints by employees or prospective employees of a government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Part I of this order. If the investigation is conducted for the Civil Rights Division by a contracting agency that agency shall report to the Civil Rights Division what action has been taken or its recommended with regard to such complaint.

C. The Civil Rights Division shall use its best efforts directly and through contracting agencies, other interested state and local agencies, contractors and all other available instrumentality to cause any labor union engaged in work under government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work or cooperate in the implementation of the purposes of this order.

D. The Civil Rights Division or any agency, officer or employee in the executive branch of the government designated by rule, regulation or order of the Civil Rights Division may hold such hearings, public or private as the Division may deem advisable for compliance, enforcement of educational purposes. The Civil Rights Division may hold or cause to be held hearings in accordance with rules and regulations issued by the Civil Rights Division prior to imposing, ordering or recommending the imposition of penalties and sanctions under this order.

E. No order for debarment of any contractor from further government contracts under this order shall be made without affording the contractor an opportunity for a hearing.

F. Sanctions and Penalties. In accordance with such rules, regulations or orders as the Civil Rights Division may issue or adopt, the Civil Rights Division or the appropriate contracting agency may publish or cause to be published the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this order and with the rules, regulations and orders of the Civil Rights Division.

1. Contracts may be cancelled in whole or in part, terminated, or suspended absolutely, or continuation of contracts may be condition upon a program for future compliance approved by the contracting agency or the Civil Rights Division; provided that any contracting agency shall refrain from entering into further contracts, extensions or other modifications of existing contracts with any non-complying contractor until such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this order.

2. Under rules and regulations prescribed by the Civil Rights Division, each contracting agency shall make reasonable efforts within a reasonable time limitation to secure compliance with the contract provisions of this order by methods of conference, conciliation, mediation and persuasion before proceedings shall be instituted under this order or before a contract shall be cancelled or terminated in whole or in part under this order for failure of a contractor or subcontractor to comply with the contract provisions of this order.

G. This Executive Order shall become effective within (60) days of its issuance.
12.2 The Contractor shall make a good-faith effort to ensure that not less than 15% of the Work performed under this Contract is performed by a small business as defined in A.R.S. § 41-1001(19). The Contractor shall report to the Owner the value of the Work performed under this provision. Upon Owner's request documentation evidencing Contractor's compliance with this provision shall be furnished in a format acceptable to Owner as a condition precedent to final payment.

SECTION 13. SUBCONTRACTS

13.1 The Contractor shall supply with its bid to the Owner a written list of all proposed subcontractors and suppliers. The Owner will promptly reply to the Contractor in writing stating whether the Owner or the DP, after due investigation, has any objection to any such proposed subcontractor or supplier. The Contractor shall not employ any subcontractor or supplier against whom the Owner or the DP has reasonable objection. If, prior to the award of the Contract, the Owner or DP has a reasonable objection to any subcontractor or supplier and refuses in writing to accept such person or organization, the apparent low bidder may, prior to the award, either withdraw his bid without forfeiture of bid security or may propose an acceptable substitution thereof provided that same results in no change in the bid price. Failure of the bidder to submit an acceptable substitute in a timely manner shall render its bid nonresponsive.

13.2 No substitution or change shall be made by the Contractor in the subcontractor/supplier list after its submission to the Owner without prior written approval by the Owner. Unapproved or untimely substitutions may cause for invalidation of the Contractor's bid in the Owner's discretion, thereby rendering the Contract voidable.

13.3 All work performed for the Contractor by a subcontractor shall be pursuant to an appropriate written agreement which specifically binds the subcontractor to all applicable terms and conditions of the Contract Documents, but no contractual relationship shall exist between any subcontractor or supplier of any tier and the Owner, unless the Owner invokes the assignment provisions of the following subsection. Upon request, the Contractor shall provide fully executed copies of any subcontracts and purchase orders to the Owner.

13.4 The Contractor hereby assigns to the Owner (and its assigns) all its interest in any subcontracts and purchase orders now existing or hereinafter entered into by the Contractor for performance of any part of the Work, which assignment will be effective upon termination of the Contract by the Owner and only as to those subcontracts and purchase orders which the Owner assumes in writing. All subcontracts and purchase orders shall provide that they are freely assignable by the Contractor to the Owner and its assigns. Such assignment is part of the consideration to the Owner for entering into this agreement with the Contractor and may not be withdrawn prior to final completion.

13.5 The Owner may require each proposed subcontractor whose subcontract will exceed a performance bond and a payment bond on Owner-approved forms in the full amount of its subcontract. The Owner will reimburse the Contractor for the documented cost of the subcontractor's performance bond premiums in the event the Owner requires such bonds by the subcontractor.

SECTION 14. COMMUNICATIONS

14.1 All project notices, requests, instructions, modifications, approvals, and claims must be in writing, unless expressly specified otherwise in the Contract.

14.2 Copies of all such communications from the Contractor to the DP shall be delivered to the Owner.

14.3 Communications will be deemed to have been made if delivered in person or if mailed to the address designated in the Contract or otherwise agreed upon by the parties.

SECTION 15. PERMITS, TAXES AND FEES

15.1 The Contractor shall secure and pay for any necessary building permits and for all other permits, fees, licenses and inspections necessary for the proper execution and completion of the Work, and shall immediately deliver copies to the Owner and DP. The Contractor shall be responsible for complying with all applicable Federal, State and local laws, codes, notice requirements, and regulations applicable to the site and prosecution of the Work. Contractor shall be responsible for and pay any costs associated with or arising from any non-compliance. Usual city building permit and inspection fees are not applicable to work constructed on the Owner's property.
15.2 The Contractor shall pay all taxes for and related to the Work or its portion thereof which are legally enacted at the time bids are received, whether or not yet effective.

SECTION 16. BONDS

16.1 The Contractor shall file with the Owner at or prior to the time of execution of the Contract, a performance bond and a payment bond on Owner-approved forms, each in the full amount of the Contract. The Surety furnishing these bonds shall be satisfactory to the Owner and shall be authorized to do business in the State of Arizona.

SECTION 17. INSURANCE

17.1 INSURANCE IN PLACE BEFORE START WORK: The Contractor shall not commence any Work until it has obtained all required bonds and insurance and has furnished satisfactory proof of insurance to the Owner. The Contractor shall not permit any Subcontractor to commence work on the Project until all bond and insurance requirements have been complied with by the Subcontractor.

17.2 REQUIRED COVERAGEs: Without limiting any liabilities or any other obligations of the Contractor, the Contractor shall provide and maintain (and cause its Subcontractors and Sub-subcontractors to provide and maintain) in a company or companies lawfully authorized to do business in the State of Arizona, and rated at least A VII in the current A.M. Best’s, the minimum insurance coverages below:

17.2.1 COMMERCIAL GENERAL LIABILITY Commercial general liability insurance, with minimum limits of $___ per occurrence, and products and completed operations aggregate limit and general aggregate minimum limit of $___.

Minimum Required Insurance Limits
Based on Total Construction Costs

<table>
<thead>
<tr>
<th>Construction Budget</th>
<th>General Liability for Contractor</th>
<th>Minimum Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000,000 to $5,000,000</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>$5,000,000 to $10,000,000</td>
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<td>$4,000,000</td>
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<td>$30,000,000 to $40,000,000</td>
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<tr>
<td>above $40,000,000</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
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</tbody>
</table>

17.2.2 BUSINESS AUTOMOBILE LIABILITY Business automobile liability insurance, with minimum limits of $1,000,000 per occurrence combined single limit, with Insurance Service Office, Inc. Declarations to include Symbol One (Any Auto) applicable to claims arising from bodily injury, death or property damage arising out of the ownership,
maintenance or use of any auto. The policy shall be endorsed to add the State of Arizona, the Arizona Board of Regents and Arizona State University as additional insureds with reference to the Contract.

17.2.3 WORKERS COMPENSATION AND EMPLOYERS LIABILITY Workers compensation and employers liability insurance as required by the State of Arizona Workers Compensation statutes as follows:

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers Compensation</td>
<td>$500,000 each accident</td>
</tr>
<tr>
<td>Employers Liability</td>
<td>$500,000 each employee/disease</td>
</tr>
<tr>
<td></td>
<td>$1,000,000 policy limit/disease</td>
</tr>
</tbody>
</table>

This policy shall include endorsement for All State coverage for state of hire.

17.2.4 BUILDER’S RISK INSURANCE Builder’s all risk insurance coverage, which shall insure against physical loss or damage to all property incorporated into the Project and shall also insure finished products. Coverage shall also cover the interests of Owner and Subcontractors of all tiers with respect to the Project, but it will not cover any machinery, tools, equipment, appliances or other personal property owned, rented or used by the Contractor, Subcontractors or Sub-subcontractors in the performance of Work, which will not become a part of the Work to be accepted by the Owner.

The Contractor shall be responsible for the deductible of each loss and shall retain responsibility, per the indemnity provisions of the Contract, for any loss not covered by the builder’s risk policy.

17.2.5 PROPERTY INSURANCE All-risk property insurance coverage covering damages and/or destruction of any and all materials and equipment, which will become part of the Work until such materials or equipment are delivered to the site of the Work.

17.3. COPIES OF POLICIES The State of Arizona, the Arizona Board of Regents and Arizona State University reserve the right to request and receive certified copies of all policies and endorsements.

17.4 CERTIFICATES OF INSURANCE Certificates of Insurance acceptable to the State of Arizona, the Arizona Board of Regents and Arizona State University shall be issued and delivered prior to commencement of the Work and shall identify the Contract and include certified copies of endorsements naming the State of Arizona, the Arizona Board of Regents and Arizona State University as Additional Insured for liability coverages. The certificates, insurance policies and endorsements required by this Section 17 shall contain a provision that coverages afforded will not be cancelled until at least thirty (30) days prior written notice has been given to Owner, the State of Arizona, the Arizona Board of Regents and Arizona State University. All coverages, conditions, limits and endorsements shall remain in full force and effect as required in the Contract and these General Conditions.

17.5 OWNER REMEDIES UPON BREACH OF SECTION 17 BY CONTRACTOR Failure on the part of Contractor to meet the requirements in this Section 17 shall constitute a material breach of the Contract, upon which Owner may immediately terminate the Contract and the Contract Documents or, in its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, and all monies so paid by the shall be repaid by Contractor upon demand, or the Owner may offset the cost of premiums against any monies due to the Contractor under the Contract or otherwise.

17.6 COSTS NOT CHARGEABLE TO OWNER Costs of coverages broader than those required or for limits in excess of those required by this Section 17 shall not be charged to the Owner.

17.7 WAIVER OF RIGHTS AGAINST THE OWNER, THE STATE OF ARIZONA, THE ARIZONA BOARD OF REGENTS OR ARIZONA STATE UNIVERSITY Contractor hereby waives and shall cause each Subcontractor, each Sub-subcontractor and each of their respective insurers providing required coverages to waive their rights of recovery against the Owner, the State of Arizona, the Arizona Board of Regents and Arizona State University and their regents, employees, agents and independent contractors.

17.8 AUTHORIZATION TO OBTAIN INFORMATION The Owner may, and the Contractor hereby authorizes the Owner to, request and receive directly from insurance companies utilized by the Contractor in meeting
the insurance requirements any and all information reasonably considered necessary in the sole discretion of the Owner.

17.9 CLAIMS REPORTING. Any failure to comply with the claim reporting provisions of the policies or any breach of a policy warranty shall not affect coverage afforded under the policy to protect Owner.

17.10 SELF-INSURANCE. The policies specified herein may provide coverage, which contain deductibles or self-insured retentions. Such deductibles and/or self-insured retentions shall not be applicable with respect to the coverage provided to Owner under such policies. The Contractor shall be solely responsible for deductible and/or self-insured retention, and Owner, at its option, may require the Contractor to secure the payment of such deductible or self-insured retention by a surety bond or an irrevocable and unconditional letter of credit.

SECTION 18. ALLOWANCES

18.1 If required by the Bid Documents issued by the Owner for the Work, the Contract price shall include an allowance or allowances as specified in the request for bids. The Contractor's price for the Work shall include all of the Contractor's costs associated with such allowance or allowances. If the actual costs to the Contractor of such allowance or allowances are different from the specified sum, increases or decreases in the cost of the allowance and associated Contractor's cost shall be adjusted in accordance with Section 28.3 (Changes) of this Agreement.

SECTION 19. INDEMNIFICATION

19.1 The Contractor shall indemnify the Owner, the State of Arizona, the Arizona Board of Regents and Arizona State University from and against all claims, demands, losses, damages, costs and expenses (including, without limitation, Owner's reasonable attorney's fees and litigation expenses) to the extent actually or allegedly arising or resulting from the negligence of Contractor, any Subcontractor, any Sub-subcontractor, any Design Professional engaged by Contractor or any officer, employee, agent or independent contractor of any of them relating to the Work. This indemnity shall not be construed to include claims, demands, losses, damages, costs and expenses to the extent arising from the negligence of the Owner or its officers, employees, agents and independent contractors (other than Contractor, any Subcontractor, any Sub-subcontractor and their officers, employees, agents and independent contractors).

19.2 Paragraph 19.1 shall continue in effect indefinitely and shall not terminate upon completion and acceptance of the Work or upon termination or expiration of the Contract.

SECTION 20. PROGRESS AND SCHEDULING

20.1 Planning, scheduling and progress monitoring are essential functions of the Contractor. Within ten (10) days after the award of the Contract, the Contractor shall prepare and submit for the Owner and the DP a Schedule of Values allocating the Contract Price among the various portions of the Work for purposes of progress payments. The Schedule of Values shall be substantially equivalent to AIA Forms G702 and G703 or as specified by Owner. In addition, Contractor shall submit Construction Progress Schedules in full accordance with the requirements and provisions located in Division 1 of the Specifications.

20.2 The Contractor shall also furnish the DP with a Narrative Report corresponding with each monthly update which shall include a description of current and anticipated problem areas, delaying factors and their impact, fragmentary networks (fragnet) of delays, and an explanation of corrective action taken or proposed. If the Project is behind schedule in any month, the Contractor's Narrative Report shall indicate precisely what measures it will take in the next thirty days to put the Work back on schedule.

20.3 The Contractor shall employ and supply a sufficient force of workers, material and equipment, and shall prosecute the Work with such diligence so as to maintain the rate of progress indicated on the Progress Schedule, to prevent work stoppage, and to ensure completion of the Project within the Contract Time.

20.4 The Contractor shall be responsible to prepare, submit and maintain the schedules and Narrative Reports indicated above, and the failure to do so may be considered a material breach of this Contract. Any additional
or unanticipated cost or expense required to maintain the schedules shall be solely the Contractor's obligation and shall not be charged to the Owner.

20.5 (NOTE: This provision is optional) As a condition precedent to the release of retained funds, the Contractor shall, after substantial completion of the work has been achieved, submit a final Contractor's Construction Schedule which accurately reflects the manner in which the project was constructed and includes actual start and completion dates for all activities on the Construction Schedule.

SECTION 21. DAILY LOG

21.1 The Contractor shall maintain a daily log of construction activities for each calendar day of the Contract Time, using a form approved by the DP. The Contractor shall document all activities at the Project site, including:

A. Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the job site, and any other weather conditions which adversely affect Work at the site;

B. Soil conditions which adversely affect Work at the site;

C. The hours of operation by Contractor and individual Subcontractor personnel;

D. The number of Contractor and Subcontractor personnel present and working at the site, by subcontract and trade, and updated schedule activity number.

E. The equipment active or idle at the site;

F. A description of the Work being performed at the site, by updated schedule activity number.

G. Any delays, disruptions or unusual or special occurrences at the site;

H. Materials received at job site; and

I. A list of all visitors at the site.

21.2 The Contractor shall provide copies of the daily logs to the Owner on a weekly basis. The daily log does not constitute written notice to the Owner when such notice is required by the Contract Documents.

SECTION 22. MISCELLANEOUS DUTIES

22.1 The Contractor shall submit to the Owner upon request all payrolls, reports, estimates, records and any other data concerning Work performed or to be performed and concerning materials supplied or to be supplied, as well as Subcontractor payment applications and each Subcontractor's progress payment check. The requirements of this subsection shall be provided in all contracts between the Contractor and its Subcontractors.

22.2 During construction and for five (5) years after Final Payment, the Contractor shall retain and shall also require all Subcontractors to retain for review and/or audit by the Owner all correspondence, meeting minutes, memoranda, electronic media, books, accounts, reports, files, time cards, material invoices, payrolls, and evidence of all communications, direct and indirect costs, and all other matters related to the bidding and performance of the Work. Upon request by the Owner, a legible copy or the original of any or all such records shall be produced by the Contractor at any time during or after construction as the Owner may request.

22.3 The Contractor shall be responsible for laying out its own Work and for any damage which may occur to work of any other contractor because of the Contractor's own errors or inaccuracies. The Contractor shall also be responsible for unloading, uncrating, storing and handling all materials and equipment to be erected or placed by it, whether furnished by the Contractor or others.
22.4 The Contractor, Subcontractors and Suppliers shall be responsible for taking all appropriate field measurements prior to fabrication and installation of any item. Such measurements shall be taken sufficiently in advance so as to avoid any delay or potential delay. Failure to adhere to this provision shall render such delays the responsibility of the Contractor.

22.5 Unless otherwise specifically mentioned, all anchors, bolts, screws, fittings, fillers, hardware, accessories, wiring, conduit, ductwork, trim and other parts required for or in connection with any item or material to make a complete, serviceable, finished and first quality installation shall be furnished and installed as part of the item whether or not expressly called for by the Drawings or Specifications.

22.6 All materials shall be shipped and stored and handled in a manner that will afford protection and ensure their being in factory-new condition at the time they are incorporated in the Work. After installation, they shall be properly protected against damage or deterioration until Final Completion of the Project.

22.7 When standards and specifications issued by The American Society of Testing and Materials, the American Institute of Steel Construction, the U.S. Department of Commerce (Commercial Standards), or other technical or standard setting organizations are cited in the Contract Documents, such standards or specifications (and all related standards or specifications) shall be equally as binding and have the full force and effect as though incorporated word for word. Unless otherwise specifically stated, the standards and specifications referred to shall be the latest edition or revision of such specifications that is in effect on the date of the public bid.

22.8 Any part of the Work damaged during installation or prior to final acceptance of Work shall be repaired so as to be unnoticeable and to be equal in quality, appearance, serviceability and other respects to an undamaged item or part of the Work. Where this cannot be fully accomplished the damaged item or part shall be replaced. After installation, all exposed surfaces and parts of an item or of the Work shall be cleaned in a manner that will not damage the finish or any of the parts of the item, so that the completed work is left in first class condition, free of all defects. All damaged or defaced Work shall be repaired or replaced to the Owner’s satisfaction at the expense of Contractor.

22.9 The Contractor shall procure and furnish to the Owner all guarantees, warranties, manuals and spares that are called for by the specifications or that are mentioned in the manufacturer's product literature. Guaranties and warranties shall commence as of the date of Substantial Completion of the Project.

22.10 The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for loss attributable when a particular design, process or the product of a particular manufacturer or manufacturers is specified. If the Contractor has any reason to believe that the design, process or product specified could be an infringement of a patent, it shall be responsible for such loss unless it promptly gives such information in writing to the DP and Owner.

22.11 The Contractor shall limit its operations to the confines of the Project, except as necessary to connect to existing utilities, and shall not, without the prior written permission of the affected property owner, and encroach on property outside the site. Contractor shall not permit unauthorized persons or activities on the site and shall maintain the site in a safe and secure manner.

22.12 The Contractor shall prearrange time with the DP whenever it becomes necessary to interrupt any service to make connections, alterations or relocations and shall fully cooperate with the Owner in doing Work so as to cause the least annoyance and interference with the continuous operation of the Owner's business or official duties. Any existing plumbing, heating, ventilating, air conditioning or electrical disconnections which may affect portions of this construction or building or any other building must be coordinated with the DP to avoid any disruption of operation within the building or construction or other building or utilities. In no case, unless previously approved in writing by the DP, shall utilities be left disconnected at the end of a workday or over a weekend. Any interruption of utilities, whether negligently, intentionally, or accidentally, shall not relieve the Contractor's responsibility for the interruption or from liability for loss or damage caused by such interruption even though such loss or damage was not foreseeable by Contractor or subcontractor, or from responsibility for repairing and restoring the utility to normal service. Repairs and restoration shall be made before the workmen responsible for the repair and restoration leave the job.
22.13 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. If the Contractor fails to properly clean up during construction, or if a dispute arises between the Contractor and/or separate Contractors as to their responsibility for cleaning up, the Owner may clean up and charge the costs thereof to the Contractors responsible as determined by the Owner and/or DP. At the completion of the work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials. If the Contractor fails to clean up at the completion of the work, the Owner may do so and the cost thereof shall be charged to the Contractor.

SECTION 23. INSPECTION OF WORK

23.1 All Work done and all materials are subject to inspection by the Owner and/or the DP to determine if they conform to the Contract Documents. The DP and Owner shall at all times have access to the Work, including materials being fabricated or stored off site. The Contractor shall furnish at the Contractor's cost any facilities necessary for sufficient and safe access to the Work.

23.2 Inspections, tests, measurements, or other acts of the Owner and/or the DP are for the sole purpose of assisting the Owner and/or the DP in determining that the Work, materials, rate of progress, and quantities comply with the Contract Documents and/or Contractor's requests for payment. These acts or functions shall not relieve the Contractor from performing the Work in full compliance with contract requirements nor relieve the Contractor from any of the quality, compliance and responsibility for the Work assigned to it by the Contract Documents. No inspection by the Owner and/or the DP shall constitute or imply acceptance or waiver of rights.

23.3 Nonconforming Work or materials may be rejected and Contractor shall correct such rejected Work without additional compensation, even if the Work or materials have been previously inspected or accepted by the Owner and/or the DP or even if the Owner and/or the DP failed to observe the unsuitable Work or materials.

23.4 Any Work required to be inspected by the DP and/or the Owner prior to being covered, which is covered up without prior inspection or without prior consent of the DP and/or the Owner, must be uncovered and recovered by the Contractor, if requested by the DP or the Owner, at no cost to Owner, notwithstanding the provisions of the following subsection.

23.5 Contractor shall notify the Owner and DP in writing at least 48 hours prior to the time at which the Owner or DP must be present to perform an inspection. Failure to provide such notice will place the Contractor at risk for all consequences of non-inspection and having to uncover work.

SECTION 24. CORRECTION OF WORK

24.1 If any portion of the Work is covered over contrary to the request of the DP or Owner or as required by the Contract or the applicable building standards, it must be uncovered for observation at the Contractor's expense if requested by the DP or Owner in writing.

24.2 If any portion of the Work, other than those portions required to be inspected by the DP and/or the Owner prior to being covered, has been covered over, the DP or Owner may request that it be uncovered for observation. If such portion is found to be in accordance with the requirements of the Contract Documents, the cost of uncovering it shall be charged to the Owner as a Change Order. If such portion is found not to be in accordance with the requirements of the Contract Documents, the Contractor shall bear such costs.

24.3 The Contractor shall promptly remove from the site and replace any material or correct any Work found by the DP or Owner to be defective or failing to conform to the requirements of the Contract, whether or not fabricated, installed or completed, and whether discovered before or after Substantial Completion. The Contractor shall bear all costs of correcting such Work or material, including the cost of necessary additional professional services and the cost of repairing or replacing all work of separate contractors or subcontractors damaged by such removal or correction. The DP shall notify the Contractor and Owner immediately in writing upon its knowledge that additional professional services will be necessary and of the extent and estimated costs of the additional services. The Owner, with the recommendation of the DP, may consent to accept such Work or material with an appropriate adjustment in Contract Price.
24.4 If the Contractor does not promptly replace or correct such Work or material, the Owner may replace or correct the Work or material, and charge or deduct the cost of removal and replacement from any monies due to the Contractor, or recover such costs from the Contractor.

24.5 If, within two (2) years after the date of Substantial Completion, any of the Work is found to be defective or not in accordance with the requirements of the Contract, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so. If the Contractor does not promptly replace or correct such Work or material, the Owner may replace or correct the Work or material, and charge or deduct the cost of removal and replacement from any monies due to the Contractor, or recover such costs from the Contractor. Nothing contained in this section shall be construed to establish a period of limitation with respect to any obligation of the Contractor under the Contract or the law. The obligation of the Contractor under this section shall be in addition to and not in limitation of any obligations imposed by special guaranties or warranties required by the Contract, given by the Contractor, or otherwise recognized or prescribed by law.

24.6 If, during the running of a guarantee or warranty period, the Contractor must perform repair work to any portion of the Work, the running of the warranty or guarantee period is tolled from the time the defect or deficiency is discovered through the time when the Contractor successfully completes all repairs and retesting and start-up activities.

SECTION 25. DELAYS AND TIME EXTENSIONS

25.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner or the DP, or by any separate Contractor employed by the Owner, or by changes in the Work, or by labor disputes, fire, unusual delay in transportation, unusually severe weather conditions, adverse soil conditions, unavoidable casualties, delays specifically authorized by the Owner, or by causes beyond the Contractor's control, avoidance, or mitigation, and without any fault or negligence of the Contractor or Subcontractor or Supplier at any tier, then the Contract Time shall be extended by Change Order for such reasonable time as the Owner may determine that such event has delayed the critical path of the Work or individual milestone or overall completion of the Work after considering the advice of the DP, if the Contractor complies with the notice and documentation requirements set forth below. The Contractor shall pay any additional fees or costs incurred by the Owner or DP as the result of delays caused by the Contractor for circumstances not excused as provided herein.

25.2 Initial notice of any delay in the Work shall be made in writing to the DP and Owner immediately but in no event later than 24 hours after discovery of the event giving rise to the delay. Then, Contractor shall provide additional details of the delay in writing to the DP and the Owner within seven (7) calendar days from the beginning of the delay. Failure to meet these time requirements shall absolutely bar any and all later claims. The detailed notice shall indicate the cause of the delay, the anticipated length of the delay, the probable effect of such delay upon the progress and cost of the Work, and potential mitigation plans. If the cause of the delay is continuing, the Contractor must give written notice every month at the same time it submits the updated progress Narrative Report to the DP. Within fifteen (15) days after the elimination of any such delay, the Contractor shall submit further documentation of the delay and, if applicable, a formal written request covering an extension of time for such delay. The written request for time extension shall state the cause of the delay, the number of days extension requested and provide a fully documented analysis of the Progress Schedule, including a fragnet and any other data demonstrating a delay in the critical path of the Work or individual milestone or the overall project completion. If the Contractor does not comply with the notice and documentation requirements set forth above, the claim for delay is absolutely barred.

25.3 If the Contractor incurs damages related to expenses caused by a delay for which the Owner is solely responsible, which is unreasonable under the circumstances, and which was not contemplated by the parties at the time of formation of this Contract, then the parties shall attempt to reach an agreement on the Contractor's claim, provided that the Contractor has notified the Owner in writing as specified above, including why the Owner is believed by the Contractor to be solely responsible for the delay. Failure to provide such timely notice shall be deemed an absolute and final waiver of any rights to additional sums. Any disputes will be resolved in accordance with the Arizona Board of Regents Policy 3-809(C), as amended or superseded, which shall be the parties' sole remedy.

25.4 The Contractor shall have no right to claim for alleged extended or unabsorbed home office overhead; claims for delays shall be limited to provable extended site costs.

Owner and Contractor
Rev. 12/2005

xx-xxxxx.Contractor
Project Name
25.5 The date of beginning and the time for completion as specified herein are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the Work embraced in this Contract shall be commenced on a date to be specified in the notice to proceed or at a preconstruction meeting, but in no event later than ten (10) days after the execution of this Agreement, whichever first occurs. Said Work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. The time for completion of the same takes into consideration the average climatic range and usual industrial conditions prevailing in this locality. If the Contractor shall neglect, fail or refuse to complete the Work within the time herein specified, or any extension thereof granted by the Owner, then the Contractor does hereby agree to pay to Owner the per diem amount specified in the Contract. This amount is agreed to be liquidated damages for such breach and not a penalty therefor. The per diem amount shall be paid for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the Work. The amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. Said sums may be withheld by the Owner from any amounts due to the Contractor from the Owner, whether as the result of this Agreement or any other obligation between the Owner and the Contractor.

25.6 The parties hereby agree that if the Contractor submits an original or updated schedule which shows the project and/or individual Milestone(s) completing earlier than required by the adjusted contractual completion date(s), the differences between the forecasted early completion and the required completion shall be considered Project-owned float available for use by both the Owner and the Contractor.

25.7 The Contractor shall not sequester shared float through such strategies as extending activity duration estimates to consume available float, using preferential logic, using extensive crew/resource sequencing, etc. Since float time within the schedule is jointly owned, no time extensions will be granted nor delay damages paid until a delay occurs which extends the work beyond the adjusted Contract completion date. Since float time within the Construction Schedule is jointly owned, it is acknowledged that Owner-caused delays on the project may be offset by Owner-caused time savings (i.e., critical path submittals returned in less time than allowed by the Contract, approval of substitution requests which result in a savings of time to the Contractor, etc.). In such an event, the Contractor shall not be entitled to receive a time extension or delay damages until all Owner-caused time savings are exceeded and the Contract completion date or milestone date is also exceeded.

25.8 It is agreed that no time extensions shall be granted nor delay damages paid unless the delay is clearly demonstrated by the updated Construction Schedule current as of the month the change was issued or the delay occurred and which delay cannot be mitigated, offset, or eliminated through such actions as revising the intended sequence of work or other reasonable means.

SECTION 26. SUSPENSION OF WORK

26.1 The Owner may, at any time and without cause, order the Contractor in writing or cause the Contractor to suspend, delay or interrupt all or any part of the Work for such period of time as the Owner may determine to be appropriate for its convenience. Equitable adjustment shall be made for any increase in the Contract Time necessarily caused by such suspension or delay by written Change Order.

26.2 If funds appropriated by the Legislature of the State of Arizona or from other legally permissible sources to perform the work become unavailable for payment by the Owner under this contract, the Owner may suspend construction for a period up to six months, after which date if no legal source of funds is available, this contract shall terminate at the option of the Owner. In event of such suspension or termination the Owner shall not be liable to the Contractor for damages of any kind, including lost profits.

SECTION 27. RIGHT TO STOP WORK
27.1 If the Contractor fails to correct defective Work as required, or fails to carry out the Work in accordance with the Contract Documents, the Owner by written notice, may order the Contractor to stop the Work or any portion of the Work, until the cause for the order has been eliminated to the satisfaction of the Owner.

27.2 The DP may stop Work without written notice for 24 hours whenever in its professional opinion such action is necessary or advisable to ensure conformity with the Contract Documents. The Contractor shall not be entitled to an adjustment in the Contract Price or Contract Time under this subsection. The right of the Owner or the DP to stop the Work shall not give rise to a duty on the part of the Owner or DP to exercise this right for the benefit of the Contractor or others.

SECTION 28. CHANGES

28.1 After this Contract is signed, Modifications in the Contract Price, the Contract Time or scope of the Work may only be made by written Change Order.

28.2 By written directive at any time, the Owner may make any changes within the general scope of the Contract or issue additional instructions, require additional or modified Work or direct deletion of Work. The Contractor shall not proceed with any change involving an increase or decrease in cost or time without prior written authorization from the Owner or DP and shall proceed in accordance with the procedures set forth in this section. If the Contractor proceeds with any change involving an increase or decrease in cost or time without written authorization as required by this paragraph, the Contractor hereby waives all rights or claims Contractor may have as a result of the change. The Owner's right to make changes shall not invalidate the Contract or relieve the Contractor of any liability. Any requirement of notice of change to the Surety shall be the responsibility of the Contractor.

28.3 The cost or credit to the Owner resulting from a change in Work shall be determined in one or more of the following ways:

A. By unit prices stated in the Agreement.

B. By cost, as defined below, properly itemized and supported by sufficient, substantiating data to permit evaluation, plus a fee of ten percent (10%) of items (1) through (5) described below. Such costs shall be itemized by crafts as defined within the schedule of values and limited to the following items directly allocable to the change in the Work:

(1) Cost of materials, including delivery but excluding Subcontractor-supplied materials.

(2) Fully-burdened cost of labor, including, but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation and fringe benefits required by agreement or routinely paid by contractor, and worker’s or workman’s compensation insurance but excluding Subcontractor’s labor.

(3) Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, contractor must prove reasonable rental rate pursuant to actual ownership costs.

(4) Cost of Subcontracted work calculated as above and Subcontractor’s Field Supervision calculated in accordance with paragraph (5) below, plus Subcontractor’s insurance and bond premiums as applicable. Insurance and bond premium cost shall not exceed a total of two percent (2%) of Subcontractor’s documented cost.

(5) Contractor’s Field Supervision not to exceed five percent (5%) of (1), (2) and (4) above; the parties agree that this mark-up shall fully cover all contractor Field Supervision overhead.

(6) Contractor’s insurance and bond premiums not to exceed a total of two percent (2%), or
documented cost.

(7) Sales tax at full value.

(8) If this method of cost or credit calculation is selected, in no event shall the combined total fee including all levels or tiers of Subcontractors exceed twenty percent (20%) of the total cost of paragraphs (1), (2), (3) and (4). Field Supervision is to be excluded at all levels for the purposes of the limit imposed by this paragraph.

C. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation; provided that such lump sum shall not exceed that amount calculated under item B. above.

28.4 If none of the above methods is agreed upon, the Contractor shall promptly proceed with performing the change, upon receipt of a written order signed by the Owner. Any dispute regarding the pricing methodology or cost of the change shall not relieve the Contractor from proceeding with the change as directed by the Owner or the DP. The cost or credit to the Owner shall be determined by the DP on the basis of the preceding subsection.

28.5 A fully executed Change Order shall be full and final settlement of all claims for direct, indirect, delay, disruption, inefficiency and any other consequential costs related to items covered or affected, as well as time extensions. Any such claim not presented by the Contractor for inclusion in the Change Order is irrevocably waived.

28.6 In an emergency affecting the safety of life, or of the structure, or of adjoining property, the Contractor, without special instruction or authorization from the Owner or DP, is permitted to act at its discretion to prevent threatened loss or injury. Any compensation claimed by the Contractor on account of such emergency work shall be determined in accordance with this section.

SECTION 29. PAYMENT

29.1 Payments on account of the Contract Price will be made monthly as Work progresses. Payment Applications, covering labor, material, equipment, supplies, and other items completed, delivered or suitably stored on site during a period ending on the last calendar day of each month, shall be submitted to the DP and the Owner by the Contractor on the current edition of AIA Documents G702 and G703, within five (5) days after end of the period. Payment Applications shall be notarized, shall be supported by such data substantiating the Contractor’s right to payment as the Owner or the DP may require, and reflect retainage, if any, as is provided. All payments shall be subject to any offset or retainage provisions of the Contract.

29.2 Each payment made to the Contractor shall be on account of the total amount payable to the Contractor, and title to all Work covered by a paid partial payment shall thereupon pass to the Owner. Nothing in this section shall be construed as relieving the Contractor from the sole responsibility for care and protection of materials and Work upon which payments have been made, for restoration of any damaged Work, or as a waiver of the right of the Owner to require fulfillment of all terms of Contract Documents.

29.3 The DP, within seven (7) days after receipt of the Payment Application, will either issue a Certificate for Payment to the Owner for such amount as is properly due or issue written notice of the reasons for withholding such a certificate.

29.4 The issuance of a Certificate for Payment will constitute a representation by the DP to the Owner, based on DP’s observations at the site and the data comprising the Application for Payment, that the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his certificate); and that the Contractor is entitled to payment in the amount certified. However, by issuing a Certificate of Payment, the DP shall not thereby be deemed to represent that the DP has made any examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract Price.
29.5 Payment may be withheld in whole or in part to protect the Owner on account of:

A. Unsatisfactory job progress as determined by the Owner.
B. Defective Work or materials not remedied.
C. Disputed Work or materials.
D. Claims or other encumbrances filed or reasonable evidence indicating probable filing of claims or other encumbrances by Subcontractors or Suppliers, or others.
E. Failure of the Contractor to make payment to Subcontractors or Suppliers within seven (7) days after receipt of each progress payment.
F. A reasonable doubt as determined by the Owner that the Work can be completed for the unpaid balance of the Contract Price or within the Contract Time.
G. The Contractor’s failure to perform any of its contractual obligations under the Contractor Documents, or any other agreement with the Owner.
H. Deficiencies or claims asserted by Owner against Contractor arising from any other project.

29.6 Within fourteen (14) days following the receipt of the Certificate of Payment, the Owner shall pay to the Contractor 90% of the value of the Work in place and materials suitably stored at the site. The remaining 10% shall be retained by the Owner until the Contract is 50% completed at which time the retainage shall be reduced to 5%; provided that: (a) the Contractor is making satisfactory progress on the Contract; and (b) in the Owner’s sole judgment, there is no specific cause or claim requiring a greater amount than 5% to be retained. Thereafter, the Owner shall pay the Contractor 95% of the value of the Work, unless and until it determines satisfactory progress is not being made, at which time the 10% retainage may be reinstated. Such 10% reinstatement would be 10% of the total contract value of Work in place and materials stored. The Owner’s sole judgment concerning the satisfactory progress of the Work shall be final.

29.7 Within sixty (60) days after the issuance of the Certificate of Final Completion by the DP and receipt of all other documents required by the Contract, all retained amounts shall be paid to Contractor as part of Final Payment:

A. The Final Payment shall not become due until the Contractor delivers to the DP full and final unconditional releases from Subcontractors and major Suppliers acknowledging payment in full. Any claim filed thereafter shall be the responsibility of the Contractor.
B. If any claim remains unsatisfied after all payments are made, the Contractor shall immediately upon demand refund to the Owner all monies that the latter may be compelled to pay in discharging such claim including all costs, interest and attorneys’ fees.

29.8 If any payment on account of the Contract Price is not made within thirty (30) days and without just cause, interest shall thereafter accrue on the unpaid principal balance at the minimum rate allowed by state law (A.R.S. § 44-1201) on the due date.

SECTION 30. WARRANTY

30.1 The Contractor warrants that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be free from faults and defects and in strict conformance with the Contract Documents.

30.2 Neither provision of manufacturers’ warranties nor Final Payment nor use or occupancy of all or a portion of the Premises by the Owner shall constitute an acceptance of Work not done in accordance with the Contract Documents or relieve the Contractor or its sureties of liability with respect to any warranties or responsibility for faulty materials and workmanship.
30.3 The Contractor or its sureties shall remedy any defects in the Work and any resulting damage to the Work or the Work of others at its own expense.

30.4 The Contractor shall be liable for correction of all damage resulting from defective Work.

30.5 If the Contractor fails to remedy any defects or damage, the Owner may correct the Work or repair the damages and the cost and expense incurred in such event shall be paid by or be recoverable from the Contractor.

30.6 The warranties provided in this section shall be in addition to and not in limitation of any other warranty or remedy provided by law or by the Contract Documents.

30.7 Contractor warrants that all products delivered, systems developed, and/or services provided shall be fault-free in performance and results with respect to the processing, storage and use of dates and all date-related data, including without limitation the successful transition into the year 2000, and successful operation prior to, during and after the year 2000.

SECTION 31. SUBSTANTIAL COMPLETION

31.1 When the Contractor requests a Substantial Completion Inspection for the Work or a designated portion thereof, the DP and the Owner shall determine the validity of the request. A list of items to be completed or corrected shall be prepared by the Contractor and presented to the Owner and the DP with the request for inspection. By submitting a request for Substantial Completion Inspection the Contractor thereby certifies that it has performed a thorough inspection of the Project in preparing the list of items to be completed or corrected, has consulted with its subcontractors, and that the remaining incomplete or defective work shall be completed within thirty (30) days of submission of the request. The Owner or the DP or both shall evaluate the Contractor's request and list of uncompleted items and, if appropriate in their judgment, add to or delete items from the list necessary to complete the work. The failure to include items on any punch list shall not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. By submitting a request for Substantial Completion Inspection, the Contractor thereby certifies that the remaining incomplete or defective Work required by the Contract Documents shall be completed within thirty (30) days.

31.2 If the DP and/or the Owner, on the basis of Substantial Completion inspection, determine that the Work has been substantially completed in accordance with the Contract Documents, then the DP will prepare a Certificate of Substantial Completion, which shall establish the date of Substantial Completion; shall state the responsibilities of the Contractor for remaining punchlist items, maintenance, heat and utilities, security, and damage to the work; and shall fix the time, not to exceed thirty (30) days, within which the Contractor shall complete the punch list. The Certificate of Substantial Completion shall be submitted by the DP to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate. The Project shall not be deemed substantially complete until the Certificate is issued irrespective of Owner occupancy.

SECTION 32. FINAL INSPECTION

32.1 When the Contractor submits in writing to the Owner a request for a final inspection of the Work, the DP and the Owner shall determine the validity of the request. Following the inspection, if there are items to be completed or corrected, the Owner and DP will determine the dollar value to be withheld in accordance with the retainage provisions of the Contract. In the event that the Contractor has not completed the punch list items within the time designated in the Certificate of Substantial Completion, the Owner retains the right to have these items corrected at the expense of the Contractor, including all architectural, engineering and inspection costs and expenses incurred by the DP and Owner.

32.2 The Owner shall not be required to release the retainage until such items have been completed and inspected.

SECTION 33. ASSIGNMENT OF CLAIMS
33.1 The Owner and Contractor recognize that in actual economic practice overcharges resulting from antitrust violations are in fact borne by Owner. Therefore, the Contractor hereby assigns to Owner any and all claims for such overcharges. The Contractor in all subcontracts shall require all Subcontractors to likewise assign all claims for overcharges to the Owner.

SECTION 34. DISPUTES

34.1 All of Contractor's claims and disputes shall first be referred to the DP for initial determination, by written notice, not more than seven (7) days from the occurrence of the event which gives rise to the dispute, or not more than seven (7) days from the date that the Contractor knew or should have known of the problem. Unless the claim is made in accordance with these time requirements, it is irrevocably waived. The DP shall render a written decision within a reasonable time. The DP's decision may be reviewed in accordance with Arizona Board of Regents Policy 3-809(C), as amended or superseded, which shall be the parties' sole remedy. Any claim not timely filed or not complete at the time of filing is irrevocably waived.

34.2 Any failure of the DP or the Owner to make a decision within the time limit set forth shall not be construed as acquiescence in all or any part of the Contractor's claim for relief.

34.3 Unless otherwise agreed in writing, the Contractor shall carry on the Work and maintain its progress during any claims and controversy proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract Documents.

SECTION 35. FORUM

35.1 No suit or action shall be commenced hereunder by any claimant other than in the Arizona Superior Court, and only after all contractual and administrative procedures have been fulfilled. By submitting a bid for this project, Contractor agrees to be bound by the ABOR University Procurement Code Dispute Resolution Procedures and waives any objections to those procedures.

SECTION 36. TERMINATION BY THE OWNER

36.1 This Contract may be terminated by the Owner under the conditions stated in A.R.S. § 38-511.

SECTION 37. TERMINATION FOR CAUSE

37.1 The Owner may terminate the Contract upon the occurrence of any one or more of the following events:

A. If the Contractor refuses or fails to prosecute the Work, or any separable part, with such diligence as will ensure its completion within the Contract Time; or if the Contractor fails to complete the Work within the Contract Time;

B. If the Contractor or any of its key subcontractors is adjudged a bankrupt or insolvent or makes a general assignment for the benefit of creditors, or if the Contractor or any of its key subcontractors or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the Contractor or any of its key subcontractors, or if a trustee or receiver is appointed for the Contractor or any of its key subcontractors or for any of the Contractor's property on account of the Contractor's insolvency, and the Contractor or its successor in interest or any of its key subcontractors does not provide adequate assurance of future performance in accordance with the Contract within ten (10) days after receipt of a request for assurance from the Owner;

C. If the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment;

D. If the Contractor fails to make prompt payments to subcontractors or suppliers at any tier, or for labor, materials or equipment;
E. If the Contractor fails to comply with laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;

F. If the Contractor fails to follow any reasonable instructions by the DP or the Owner;

G. If the Contractor performs Work which deviates from the Contract Documents, and neglects or refuses to correct rejected Work; or

H. If the Contractor otherwise violates in any material way any provisions or requirements of the Contract Documents.

37.2 Once the Owner determines that sufficient cause exists to justify the action, the Owner may terminate the Contract without prejudice to any other right or remedy the Owner may have, after giving the Contractor and its Surety seven (7) days notice by issuing a written Declaration of Default. The Owner shall have the sole discretion to permit the Contractor to remedy the cause for the contemplated termination without waiving the Owner's right to terminate the Contract.

37.3 If the Contract is terminated, the Owner may take over the Work and prosecute it to completion, by contract or otherwise, and may exclude the Contractor from the site. The Owner may take possession of the Work and of all of the Contractor's tools, appliances, construction equipment, machinery, materials, and plant which may be on the site of the Work, and use the same to the full extent they could be used by the Contractor, without liability to the Contractor. In exercising the Owner's right to prosecute the completion of the work, the Owner may also take possession of all materials and equipment stored at the site or for which the Owner has paid the Contractor but which are stored elsewhere, and finish the Work as the Owner deems expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.

37.4 If the unpaid balance of the Contract Price exceeds the direct and indirect costs and expenses of completing the Work, and all Owner damages including liquidated damages and compensation for additional professional and consultant services, such excess shall be used to pay the Contractor for the cost of the Work it performed and a reasonable allowance for overhead and profit. If such costs exceed the unpaid balance, the Contractor shall immediately upon demand pay the difference to the Owner. In exercising the Owner's right to prosecute the completion of the Work, the Owner shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work, and the Owner shall not be required to obtain the lowest figure for Work performed in completing the contract. If the Owner takes bids for remedial Work or completion of the project, the Contractor shall not be eligible for the award of such contracts.

37.5 If the Contract is terminated, the Owner may demand that the Contractor's Surety take over and complete the Work on the Contract. The Owner may require that in so doing, the Contractor's Surety not utilize the Contractor in performing the Work. Upon the failure or refusal of the Contractor's Surety to take over and begin completion of the Work within 20 days after the demand, the Owner may take over the Work and prosecute it to completion as provided above.

37.6 The Owner shall have the option of requiring any, all or none of the Subcontractors to perform according to their subcontracts and may assign any or all of the subcontracts to a general contractor selected to complete the Work.

37.7 If the Owner takes over the Work, unexecuted orders entered into by the Contractor for performance of any part of the Work will be effective upon acceptance by the Owner in writing and only as to those subcontracts and purchase orders which the Owner designates in writing.

37.8 The Contractor shall be liable for any damage to the Owner resulting from the termination or from the Contractor's refusal or failure to complete the Work, and for all costs necessary for repair and completion of the Project over and beyond the amount of the Contract. The Contractor shall be liable for all legal fees and costs required to enforce the provisions of the Contract.
37.9 If the Owner terminates the Contract, the Contractor shall remain liable for liquidated damages for delay until such reasonable time as may be required for final completion of the Work. Such damages shall be in addition to and not in lieu of any other damages sustained by Owner in completing the Work.

37.10 In the event the Contract is terminated, the termination shall not affect any rights of the Owner against the Contractor. The rights and remedies of the Owner under this section are in addition to any other rights and remedies provided by law or under this Contract. Any retention or payment of monies to the Contractor by the Owner will not release the Contractor from liability.

37.11 If the Contract is terminated under this section, and it is determined for any reason that the Contractor was not in default under the provisions of this Section, the termination shall be deemed a Termination for Convenience of the Owner and, the rights and obligations of the parties shall be determined in accordance with the following section.

SECTION 38. TERMINATION FOR CONVENIENCE OF THE OWNER

38.1 The Owner, by written notice to the Contractor, may terminate this Contract in whole or in part when sufficient appropriated or other funds are not available or in the sole discretion of the Owner it is in the Owner's best interest. In such case, the Contractor shall be paid for all Work executed and reasonable termination expenses, and a reasonable allowance for profit and overhead on Work done, provided that such payments exclusive of termination expenses shall not exceed the total Contract Price as reduced by other contract payments previously made to the Contractor and as further reduced by the value of the Work as yet not completed. The Contractor shall not be entitled to profit and overhead on Work, which was not performed.

SECTION 39. ASSIGNMENT OF CONTRACT

39.1 Contractor shall not assign any amount or part of the Contract or any of the funds to be received under the Contract unless Contractor has the prior written approval of the Owner and the Contractor's Surety has been given notice and has given written consent to any such assignment.

SECTION 40. LAW TO GOVERN

40.1 This Contract is made under and shall be construed in accordance with the laws of the State of Arizona. If any portion of this Contract is found to be unenforceable the rest and remainder of the Contract shall remain in full force and effect so as to effectuate the intent of the parties. Each party acknowledges that it has had an opportunity to review this Contract with counsel and this document shall be construed fairly and equitably so as to effectuate the intention of the parties irrespective of who is determined to have been the drafter of the document.

CONTRACTOR

OWNER

ARIZONA BOARD OF REGENTS
for on behalf of
ARIZONA STATE UNIVERSITY

By: ___________________________ By: ___________________________
Name: _________________________ Name: _________________________
(Printed) (Printed)
Title: __________________________ Title: __________________________
Date: __________________________ Date: __________________________
SECTION 01010 SUMMARY OF WORK

PART 1 - GENERAL PROJECT REQUIREMENTS

Work Included: The Work under the Base Bid of the Contract shall include all work indicated or specified within the contract limit lines unless the Work is specifically indicated as "Not in Contract."

Specifications: In the preparation of these specifications an effort has been made to segregate the various branches of the Work under headings, by trades. This is done only for convenience and shall not relieve the Contractor of the responsibility of furnishing every item indicated or specified whether properly segregated or not.

Specification arrangement is in accordance with the "Construction Specification Institute (CSI) for the Organization of Construction Project Manuals." The five (5) digit section designation is in accordance with this format.

No responsibility will be assumed by ASU or its representative for omissions or duplications by the Contractor in the completion of the Contract due to any alleged error in the arrangement of the material in these specifications; nor shall any such segregation of work and materials operate to make ASU or its representative an arbiter in defining limits to the agreements between the Contractor and his subcontractors or suppliers.

The misplacement, addition or omission of any letter, work or punctuation mark, shall in no way damage the true spirit, intent, or meaning of these specifications.

The words "shown", "indicated", "noted", "scheduled", or words of like effect shall be understood to mean that reference is made to the drawings accompanying these specifications. Where reference herein is made to colors or finishes "as selected" the reference is to the DP. Reference to known standards within these specifications shall mean and intend the latest edition or amendments published prior to date of these specifications, unless specifically specified otherwise, and to such portions of it that relate and apply directly to the material or installation called for on the Project.

Disposition of Utilities: Observe rules and regulations governing the respective utilities in executing all work under this heading.

Adequately protect active utilities from damage, and remove or relocate only as indicated or specified.

Remove, plug or cap inactive and abandoned utilities encountered during the Work. If there are no specific requirements, plug or cap such utility lines at least three (3) feet outside of new building walls or as required by local regulations.

Architectural and Engineering Services: It is understood that normal architectural and engineering liaison for the purpose of interpretation of the Contract Documents is provided for by ASU. Should any services of the A/E be required to assist in the corrections of errors or omissions in construction by the Contractor, or services of the DP be required because of changes in structure or equipment where the Contractor has requested approval of substitute methods or materials, these services will be provided by the DP at his standard hourly rates, and shall be paid for by the Contractor.

Safety Requirements: These Construction Documents, and the joint and several phases of construction hereby contemplated are to be governed, at all times, by applicable provisions of the federal laws, including but not limited to, the latest amendments of the following:

Williams-Steiger Occupational Safety & Health Act of 1970, Public Law, 91-596.
Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.
Part 1518 - Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.
Arizona OSHA of 1972 and Federal OSHA 1970, as it applies to Arizona law, shall constitute the outline for the safety program to be adhered to during the course of the Project.
A copy of these publications shall be available at the job site for reference.

Approved Applicators: Where specific instructions in these specifications require that a particular product and/or materials be installed and/or applied by an approved applicator of the manufacturer, it shall be the Contractor's responsibility to ensure that any subcontractors used for such work be approved applicators.

Watertight/Weather tight: Anything in the Contract Documents notwithstanding, the Contractor accepts the responsibility of constructing a watertight/weather tight project.

Extra Work: In accordance with the General Conditions and when authorized in writing by ASU, extra work may be ordered. Claims for additional compensation, on account of extra work done, will not be recognized unless such extra work has been authorized in advance and in writing by ASU.

Signed Drawings and Specifications: Immediately upon signing the Contract for the Work, the Contractor shall sign three (3) complete sets of Construction Documents (for Project manual signature to be applied on Table of Contents sheet thereof) as additional evidence of his understanding of the Work called for with such alternates and amendments as specifically mentioned in the agreement. These shall become Contract Drawings and Contract Project Manual. The Contractor shall file one set with ASU and keep one set at the job site at all times during the progress of the Work. The job site set shall be the Contractor’s copy. The DP will retain one complete set in his office.

Archaeological Features: The attention of the Contractor is directed to ARS Sections 41-771 and 41-772, which make it a misdemeanor, punishable by a fine not exceeding $500 and imprisonment not exceeding six (6) months, to investigate, explore or excavate, in either federal or state land, in or on prehistoric ruins, ancient burial grounds, fossilized footprints, hieroglyphics and all other archaeological features of Arizona without permits from the archaeological branch of the University of Arizona and the County Board of Supervisors.

In view of the above, it is a provision of the Contract that when archaeological features are turned up, encountered or unearthed in the excavation of the Work, the Contractor shall immediately notify ASU. The Contractor shall notify ASU in writing, a schedule of dates as to demolition, excavation and trenching. During these operations ASU may elect to have a field representative on site to observe and investigate subsoil conditions and obtain samples of artifacts as necessary.

PART 2 - SPECIFIC PROJECT REQUIREMENTS

Project Description

Project Site:

Interpretation of Drawings and Specifications: In general, provision of the specifications take precedence over notes on the drawings; addenda or bulletins to specifications take precedence over original specification or earlier addenda; dimensional figures take precedence over scaled measurements; large scale drawings and details take precedence over those of smaller scale; drawings of the latest date take precedence over earlier ones. Work indicated or required (but not expressly noted, detailed or specified) shall be made the same as similar or corresponding elements which are fully noted, detailed or specified. The Contractor shall comply with the true intent and meaning of the drawings and specifications taken as a whole.

Standards of quality and performance indicated on the drawings or described in the specifications shall be understood to be minimum requirements only. When building codes or other legal authority demand higher standards, such legal requirements shall be met.

Figures on the drawings indicate rough construction with no allowance for finish of any kind, except the dimensions of details of the finished work. The DP will not be responsible for scaling the drawings.
The drawings are generally diagrammatic and indicate manner, method, and nature of the installation. The specifications denote style and quality of material and workmanship. Where a conflict between the drawings and the specifications arise the DP shall be promptly notified. The DP will make the proper interpretation and his decision shall be final. When the term "or equal" or "approved equal" or "equivalent to" is used, it shall be construed to mean with the approval of the DP. Substitutions made without DP approval shall be removed and replaced without additional cost to ASU.

Occupancy prior to Completion: ASU shall have the right to occupy portions of the building that are completed on or after the specified completion date (even though the Contractor may not have completed the entire project). Such occupancy by ASU will not release the Contractor or his bonding agency from any warranties or guarantees and final completion of work in accordance with the Contract Documents.

Contractor Use of Premises: The Contractor shall limit the storage of materials and equipment to the areas indicated. At no time during the Work under the Contract shall the Contractor place, or cause to be placed, any material or equipment, etc., at any location that would impede or impair access to or from the present facilities.

The Contractor shall cooperate with ASU to the fullest extent in providing traffic control during course of construction so as to provide a minimum of inconvenience to ASU.

The Contractor shall send proper notices, make all necessary arrangements, and perform all services required in the care and maintenance of all ASU and public utilities. The Contractor shall, during the construction period and until final acceptance of the Work as a whole by ASU, assume all responsibility concerning the same for which ASU may be liable.

It is of paramount importance that the Work of this contractor does not interfere in any way with the normal operation of the existing utility services and no interruption of the utility services can be allowed. The Contractor will coordinate all work affecting services in the existing building with ASU's Representative.

END OF SECTION
SECTION 01020 ALLOWANCES

Work Specified Herein
All allowances which the Contractor shall provide for designated work on the Project, and shall include in his bid proposal.

Allowances
The Contractor shall include in the Contract Sum the amount of $

$ __________________ for ________________________________

Administration of Allowances
Allowances shall cover the cost to the Contractor, less any applicable trade discount of the materials and equipment required by the allowance, delivered to the site.

The Contractor’s costs for unloading and handling on the site, labor, installation costs, overhead, profit, all applicable taxes and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowances.

Whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change order, the amount of which will recognize proportionate changes, if any, in handling costs on the site, labor, installation costs, overhead, profit, and other expenses.

END OF SECTION
SECTION 01040 COORDINATION

Work Specified Herein:

This section describes various requirements for coordination of the Work.

Coordination:

The Contractor will coordinate with ASU's separate contractors at the site through ASU’s representative.

END OF SECTION
SECTION 01050 FIELD ENGINEERING

Work Specified Herein.

This section describes requirements for verifying, establishing and maintaining construction grades, lines, levels and monuments.

General.

The Contractor shall, before commencing work, verify all grades, lines, levels and dimensions and indicated and report any errors or inconsistencies to the DP. The Contractor shall not proceed until such errors or inconsistencies are corrected.

The Contractor shall provide construction staking and surveying from base lines, grades, and bench marks shown on the plans. Under no circumstances will the Contractor be granted a time extension to this contract due to the lack of construction survey information. Any discrepancies or inconsistencies in design of base lines and grades revealed in construction operations shall be brought to the ASU representative's attention immediately for correction or clarification.

The Contractor shall establish and maintain all buildings and construction grades, lines, levels and bench marks, and shall be responsible for the accuracy and protection of the same. This work shall be accomplished by a licensed civil engineer or surveyor. The Contractor shall protect all temporary benchmarks and maintain them in place for the duration of the Contract or until such time their removal does not affect completion of the Project.

The Contractor shall not remove any property line markers or monuments or data established by ASU. If such are damaged or removed, the Contractor shall bear the cost of replacement.

END OF SECTION
SECTION 01070 CUTTING AND PATCHING

Work Specified Herein.

This section describes general requirements pertaining to cutting (including excavation), fitting, and patching of the Work.

Cutting and Patching of Work.

The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

The Contractor shall not damage or endanger any portion of the Work, or the Work of ASU, or any separate contractor, by cutting, patching or otherwise altering any work. The Contractor shall not cut or otherwise alter the Work of ASU or any separate contractor except with the written consent of ASU and of such separate contractor. The Contractor shall not unreasonably withhold from ASU or any separate contractor his consent to cutting or otherwise altering the Work.

The Contractor shall hold any cutting, fitting or patching of new work to the absolute minimum. Should cutting, fitting or patching become necessary, it shall be performed to the minimum requirements as hereinafter stated and as stipulated elsewhere in the Contract Documents. Structural elements shall not be cut without the written consent of the DP.

In all cases, the Contractor shall exercise extreme care in cutting operations and perform such operations under adequate supervision by competent mechanics skilled in the applicable trade. Openings shall be neatly cut and shall be kept as small as possible to avoid unnecessary damage. Careless and/or avoidable cutting, damage, etc., will not be tolerated, and the Contractor will be held responsible for such avoidable or willful damage.

All replacing, patching and repairing of all materials and surfaces cut or damaged in the execution of the Work shall be performed by experienced mechanics of the several trades involved. Such replacing, repairing and/or patching shall be done with the applicable materials, in such a manner that all surfaces so replaced, etc., will, upon completion of the Work, match the surrounding similar surfaces.

END OF SECTION
SECTION 01080 APPLICABLE STANDARDS

Work Specified Herein.

Throughout the Contract Documents, reference is made to codes and standards which establish qualities and type of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.

Reference to known standards within these specifications shall mean and intend the latest edition or amendment published prior to date of these specifications, unless specifically specified otherwise, and to such portions of it that relate and apply directly to the material or installation called for on the Project.

Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.

It is also the Contractor's responsibility when so required by the Contract Documents or by written request from the DP, to deliver to the DP all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the DP, and generally will be required to be copies of a certified report of tests conducted by a testing agency approved for the purpose by the DP.

In procuring all items used in this work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standard, and to verify that the items procured for use in this work meet or exceed the specified requirements.

The DP reserves the right to reject items incorporated into the Work which fail to meet the specified minimum requirements. The DP further reserves the right, and without prejudice to other recourse the DP may take, to accept non-complying items subject to an adjustment in the contract amount as approved by the DP and ASU.

Applicable standards and their abbreviations listed in these specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

AA  Aluminum Association
AAMA  Architectural Aluminum Manufacturers Association
AASHTO  American Association of State Highway and Transportation Officials
ABPA  Acoustical and Board Products Association
ACI  American Concrete Institute AGA American Gas Association
AGC  American General Contractors
AHC  Architectural Hardware Consultant
AI  Asphalt Institute
AIA  American Institute of Architects
   American Insurance Association
AIEE  American Institute of Electrical Engineers
AISC  American Institute of Steel Construction
AISI  American Iron and Steel Institute
AMCA  Air Moving and Condition Association
AMG  Arizona Masonry Guild ANSI American National Standards Institute
AOSHA  Arizona Occupational Safety and Health Act
APA  American Plywood Association
ARI  Air Conditioning and Refrigeration Institute
ASHRAE  American Society of Heating, Refrigeration and Air Conditioning Engineers
ASTM  American Society for Testing and Materials
ASME  American Society of Mechanical Engineers
AWPI  American Wood Preservers Institute
AWS  American Welding Society
AWSC  American Welding Society Code
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>ASI</td>
<td>Architectural Woodwork Institute</td>
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<tr>
<td>AWPB</td>
<td>American Wood Preserves Bureau</td>
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<td>AWWA</td>
<td>American Water Works Association</td>
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<tr>
<td>BIA</td>
<td>Brick Institute of America</td>
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<tr>
<td>CRA</td>
<td>California Redwood Association</td>
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<tr>
<td>CRS</td>
<td>Concrete Reinforcing Steel Institute</td>
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<td>CS</td>
<td>Commercial Standards</td>
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<td>CSI</td>
<td>Construction Specifications Institute</td>
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<tr>
<td>CTI</td>
<td>Cooling Tower Institute</td>
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<td>FGMA</td>
<td>Flat Glass Manufacturer's Association</td>
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<td>FIA</td>
<td>Factory Insurance Association</td>
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<tr>
<td>FM</td>
<td>Factory Mutual</td>
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<td>FS</td>
<td>Federal Specifications</td>
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<tr>
<td>FTI</td>
<td>Facing Tile Institute</td>
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<tr>
<td>ICBO</td>
<td>International Conference of Building Officials</td>
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<tr>
<td>IEEE</td>
<td>Institute of Electrical and Electronics Engineers</td>
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<tr>
<td>IES</td>
<td>Illuminating Engineering Society</td>
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<tr>
<td>LIA</td>
<td>Lead Industries Association</td>
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<td>MIA</td>
<td>Marble Institute of America</td>
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<tr>
<td>MLMA</td>
<td>Metal Lathe Manufacturers Association</td>
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<tr>
<td>MS</td>
<td>Military Specifications</td>
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<tr>
<td>NAAMM</td>
<td>National Association of Architectural Metal Manufacturers</td>
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<tr>
<td>NBHA</td>
<td>National Builders Hardware Association</td>
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<tr>
<td>NBFU</td>
<td>National Board of Fire Underwriters</td>
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<tr>
<td>NBS</td>
<td>National Bureau of Standards</td>
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<tr>
<td>NCMA</td>
<td>National Concrete Masonry Association</td>
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<td>NEC</td>
<td>National Electrical Code</td>
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<td>NEMA</td>
<td>National Electrical Manufacturers Association</td>
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<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
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<td>NFPA</td>
<td>National Forest Products Association</td>
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<td>NMWIA</td>
<td>National Mineral Wood Insulation Association</td>
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<tr>
<td>NTMA</td>
<td>National Terrazzo and Mosaic Association</td>
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<tr>
<td>NWMA</td>
<td>National Woodwork Manufacturer's Association</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Act (Federal)</td>
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<tr>
<td>PCI</td>
<td>Precast Concrete Institute</td>
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<td>PCA</td>
<td>Portland Cement Association</td>
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<td>PDI</td>
<td>Plumbing Drainage Institute</td>
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<td>PEI</td>
<td>Porcelain Enamel Institute</td>
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<td>PS</td>
<td>Product Standards</td>
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<td>SDI</td>
<td>Steel Door Institute</td>
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<td>SJI</td>
<td>Steel Joist Institute</td>
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<tr>
<td>SSPC</td>
<td>Steel Structures Painting Council</td>
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<tr>
<td>TCA</td>
<td>Tile Council of America</td>
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<tr>
<td>TPI</td>
<td>Truss Plate Institute</td>
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<tr>
<td>UBC</td>
<td>Uniform Building Code</td>
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<td>UL</td>
<td>Underwriters' Laboratories, Inc.</td>
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<tr>
<td>UPC</td>
<td>Uniform Plumbing Code</td>
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<tr>
<td>USDA</td>
<td>United Stated Department of Agriculture</td>
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<tr>
<td>VI</td>
<td>Vermiculite Institute</td>
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<tr>
<td>WCLA</td>
<td>West Coast Lumberman's Association</td>
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<tr>
<td>WCLB</td>
<td>West Coast Lumber Bureau</td>
</tr>
<tr>
<td>WIA</td>
<td>Woodwork Institute of Arizona</td>
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<tr>
<td>WPOA</td>
<td>Western Plumbing Officials Association</td>
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<tr>
<td>WWPA</td>
<td>Western Wood Products Association</td>
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END OF SECTION
SECTION 01090 ABBREVIATIONS

Work Specified Herein.
This section describes abbreviations used through the Contract Documents.

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>All abbreviations and symbols have been noted on the project drawings.</td>
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</table>

END OF SECTION
SECTION 01100 ALTERNATIVES

**Work Specified Herein:** All alternate bid items for which contractors are required to submit bids. The Bidders shall insert cost numbers in the respective locations as provided on the bid form. Each bid is to include its respective proportional amount of overhead and profit.

Alternate Bids:

END OF SECTION
SECTION 01200 PROJECT MEETINGS

Work Specified Herein: This section describes criteria for project meetings to be held both before and during construction. This section is complementary to the General Conditions and Supplementary General Conditions and nothing herein shall be considered to waive any requirements of the General Conditions or Supplementary General Conditions.

Preconstruction Conference: A preconstruction conference to discuss the project work will be held at a time designated by ASU. The Contractor, together with representatives of his major subcontractors, shall attend, as will ASU and its representatives. The purpose of this conference is to discuss the project in detail, including scheduling of work, and to answer any questions that may arise. Unless followed up in writing, verbal acknowledgements by anyone present shall not be binding.

Progress Meetings: At a time designated by ASU, a weekly progress meeting will be held at the job site. The Contractor, together with representatives of his major subcontractors shall attend, as will ASU and its representatives. The Contractor shall be responsible for notifying his subcontractors of their required attendance. The purpose of these meetings is to discuss the job progress, and to resolve any problems that may have developed since the last meeting. The Contractor will be prepared to discuss activities completed during the past week and activities to be worked on during the next week, with emphasis on activities that will commence or end, and those activities which are critical path items. The Contractor will present a summary of any current or anticipated delaying factors with a plan to resolve such factors. Unless followed up in writing, verbal authorizations or acknowledgements by anyone present shall not be binding.

Other Meetings: Other meetings will be scheduled by ASU as needs dictate. The Contractor will assemble subcontractors and vendors as requested by ASU for these meetings.

Meeting Minutes: The DP will take and issue minutes for all scheduled meetings.

END OF SECTION
SECTION 01300 SUBMITTALS

Work Specified Herein: This section outlines, in general, as a convenience to the Contractor, submittals required before commencing construction or during the course of construction of the Project. This section is complementary to the General Conditions and Supplementary General Conditions, and nothing herein shall be considered to waive any requirements of the General Conditions or Supplementary General Conditions.

See Section 01340 for provisions concerning submittal of shop drawings, product data and samples.

Construction Schedule and Cost Breakdown: Immediately after execution and delivery of the Contract and before the first partial payment is made, the Contractor shall deliver to the DP a construction progress schedule in a form satisfactory to the DP showing the proposed dates of commencement and completion of each of the various subdivisions of the Work required under the Contract Documents.

The Contractor shall submit a schedule of the anticipated monthly payments that will become due in accordance with the progress schedule.

The Contractor shall submit an itemized breakdown of the costs of the various subdivisions of the Work on AIA Document G-702 for the purpose of evaluating the Work completed for each monthly payment. Each monthly payment request shall be submitted in the same form with all data required by the form completed.

The figures used in making up any of these schedules will be used only for determining the basis of partial payments, and will not be considered as fixing a basis for additions to or deductions from the contract price.

Progress Report: The Contractor shall submit monthly an updated progress report indicating work completed during the preceding month, and indicate any revisions to the Construction Progress Schedule. Two (2) copies shall be submitted with the request for payment.

Progress Charts: Each month with the request for payment the Contractor shall submit two (2) copies of a graphic progress chart (CPM Schedule, required for construction contracts of $750,000 and greater), adjusted to graphically exhibit the status of each phase of the Work, and corrected to show any differentials in starting and completion dates included in the original chart. This shall also be a prerequisite for payment.

Daily Reports: The Contractor shall maintain a written daily log at the job site, with copies provided to the DP and/or ASU upon request. Reports shall include, but not necessarily be limited to, the following:

♦ Classification and number of workmen.
♦ Description of work accomplished.

Construction Progress Photographs: The Contractor shall provide construction progress photographs for all work under the Contract as specified herein.

On approximately the first day of each month (weather conditions allowing) after construction begins, construction photographs will be taken from locations as directed by the DP. Photographs will be taken similarly on each succeeding month during the course of construction.

Number of photographs required shall be at a minimum as follows:

Projects with a construction value up to $1,000,000:

-4 photos required

Projects with a construction value from $1,000,000 to $5,000,000:
-6 photos required

Projects with a construction value from $5,000,000 to $10,000,000:

-8 photos required

Projects with a construction value over $10,000,000:

-10 photos required

Photographs shall be taken by a professional photographer using professional equipment. Photographs will be taken from as close advantage point as possible, and at such an angle as to clearly show subject work. Camera will be precisely focused to show maximum detail.

The Contractor will deliver four (4) sets of 8" x 10" color, glossy prints, of each picture printed on double weight paper. One (1) set of the prints will be provided with linen or muslin backs having a 1" binding tab along the 8" side. Prints will be submitted to the DP monthly, along with pay request.

The Contractor shall identify all photographs as to view, time of day, date, project name, project location, DP, ASU, contractor, photographer and negative number for reordering purposes. Identification shall appear on the back on each print, lettered on in ink.

Upon completion of the project work, the Contractor will take color photographs as per the aforementioned project from locations directed by the DP. Four (4) complete sets will be submitted to the DP per instructions above.

END OF SECTION
SECTION 01310 CONSTRUCTION SCHEDULE

Work Specified Herein: To assure adequate planning and execution of the Work so that the Work is completed within the number of calendar days allowed in the Contract, and to assist the DP in appraising the reasonableness of the proposed schedule and in evaluating progress of the Work, prepare and maintain the schedules and reports described in this section.

Qualifications of Scheduling Personnel: The Contractor shall employ a scheduler who is thoroughly trained and experienced in compiling construction schedule data, in analyzing by use of Critical Path Method or PERT, and in preparation and issuance of periodic reports as required below.

Reliance Upon Approved Schedule: The construction schedule as approved by the DP will be an integral part of the Contract, and will establish interim contract completion dates for the various activities.

Should any activity not be completed within fifteen (15) days after the stated scheduled date, the DP shall have the right to order the Contractor to expedite completion of the activity by whatever means the DP and/or ASU deems appropriate and necessary, without additional compensation to the Contractor.

Should any activity be thirty (30) or more days behind schedule, the DP shall have the right to perform the activity or have the activity performed by whatever method the DP and/or ASU deems appropriate.

Costs incurred by the DP in connection with expediting construction activity under this article shall be reimbursed to the DP by the Contractor.

It is expressly understood and agreed that failure by the DP to exercise the option to either order the Contractor to expedite an activity, or to expedite the activity by other means, shall not be considered precedent setting for any other activities.

Preliminary Analysis: Within ten (10) days after receipt of Notice to Proceed, the Contractor shall submit one (1) reproducible copy and four (4) prints of a preliminary construction schedule, plus four (4) prints of proposed format for materials status reports, prepared in accordance with Part III of this section.

Construction Schedule: Within thirty (30) days after receipt of Advice of Award and Notice to Proceed, the Contractor shall submit one (1) reproducible and four (4) prints of the construction schedule prepared in accordance with this section.

Periodic Reports: On the first working day of each month, the Contractor shall submit four (4) prints of the updated construction schedule.

Accompanying each periodic submittal of construction schedule, the Contractor shall submit four (4) prints of the updated materials status reports.

REPORT FORMATS

Construction Diagram: The Contractor shall graphically show the order and interdependence of all activities necessary to complete the Work, and the sequence in which each activity is to be accomplished, as planned by the Contractor and his project field superintendent in coordination with all subcontractors whose work is shown on the diagram. Activities shown on the diagram shall include, but are not necessarily limited to:

1. Project mobilization;
2. Submittals and approvals of shop drawings and samples;
3. Procurement of equipment and critical materials;
4. Fabrication of special material and equipment, and their installation and testing;
5. Final cleanup;
6. Final inspection and testing; and,
(7) All activities by the DP that affect progress, required dates for completion, or both, for all and for each part of the Work.

The detail of information shall be such that duration times of activities shall normally range from one (1) to fifteen (15) days. The selection and number of activities shall be subject to the DP's approval.

The Contractor shall show on the diagram, as a minimum for each activity, a description of each activity, cost, and activity duration in calendar days. The diagram shall be submitted on a sheet thirty (30") inches high by the width required.

**Materials Status Reports:** The Contractor's standard materials status report form will be acceptable if, in the DP's judgment, it provides sufficient pertinent data to determine that materials procurement flow is adequate for all needs of the Work.

**Contents:**

1. Item description, listed in accordance with Specifications Section number in which the item is called for;
2. purchase Order number and date of issue;
3. vendor name;
4. date shipped, and shipping means utilized;
5. estimated date of arrival at job site; and,
6. actual date of arrival at job site, and receiving report number.

On the letter of transmittal accompanying periodic reports, on an accompanying summary sheet, or by other means acceptable to the DP's, the Contractor will clearly indicate those items deliveries of which are critically overdue or otherwise hazardous to maintenance of the approved schedule.

**Construction Status Report:** Contents:

1. Report actual progress by updating the mathematical analysis;
2. note on the summary report, or clearly show on a revised issue of affected portions of the detailed diagram, all revisions causing changes in the detailed program;
3. revise the summary report as necessary for clarity;
4. show activities or portions of activities completed during the reporting period, and their actual value;
5. state the percentage of work actually completed and scheduled as of the report date, and the progress along the critical path in terms of days ahead of or behind the allowable dates;
6. if the Work is behind schedule, also report progress along other paths with negative slack; and,
7. include a narrative report which shows, but is not necessarily limited to:
   a) A description of the problem areas, current and anticipated;
   b) Delaying factors, and their impact; and,
   c) An explanation of corrective actions taken or proposed.

**Revisions:** Make only those revisions to approved construction schedule and approved materials status reports as are approved in advance by the DP.

END OF SECTION
SECTION 01340
SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Work Specified Herein: All requirements and procedures for submittal of shop drawings, product data and samples required for all work on the Project. This section is complementary to the General Conditions and Supplementary General Conditions and nothing herein shall be considered to waive any requirements of the General Conditions or Supplementary General Conditions.

General: Manufacturer's samples shall be submitted to the DP, as required in the specifications or where color, selection, finish, style, or texture is involved.

The Contractor shall provide shop drawings, project data and samples specified herein in accordance with the following requirements.

Shop drawings, material lists, manufacturer's literature, samples, and other required information shall be submitted through the DP or DP in sufficient time to permit proper consideration and action on same before any materials or items, which such shop drawings, information and samples represent, are ordered. Sufficient time shall be allowed so that no delay occurs due to required lead time in ordering or delivery to the job site.

The Contractor will be held responsible for any delay in progress of the Work due to his failure to observe these requirements. Time for completion of the Contract will not be extended on account of the Contractor's failure to submit shop drawings, product data and samples promptly.

Each submission shall be accompanied by the required number of contractor Transmittal Forms, properly filled in.

Shop Drawings, Product Data: The Contractor shall furnish to the DP, one (1) reproducible mylar transparency and five (5) prints of each sheet of shop (or setting) drawings and schedules for parts of the Work as specified or required. Ample time shall be allowed for DP's comments and review. The DP will correct, annotate, clarify, or amplify said mylars or, at his option, require the Contractor to do so.

Each shop drawing submittal shall be accompanied by three copies of the Contractor's Transmittal Form, signed by the Contractor.

The Work required by shop drawings shall not be executed until confirmation of review is obtained.

The Contractor shall submit shop drawings and details sufficiently in advance of the Work which they cover, and in accordance with a prearranged schedule, to afford ample time for checking, correcting and rechecking, if necessary, for such drawings and details.

Before submitting shop drawings for review, the Contractor shall check shop drawings of subcontractors for accuracy, ascertain that all work contiguous with and having bearing on other work shown on shop drawings is accurately drawn, and that work shown is in conformity with contract requirements.

All such drawings and details, when submitted, must bear the stamp of approval of the Contractor, bearing checked data, as evidence that such drawings and details have been checked by him. Said "stamp" shall clearly state that the Contractor has checked the drawings and, by his signature, he so certifies. Any drawings submitted without such executed stamp of approval, or whenever it is evidenced (despite the stamp) that the drawings have not been checked, they will not be considered and will be returned to the Contractor for resubmission. In such event, it will be deemed that the Contractor has not complied with this provision and the Contractor shall bear risk of all delays to the same extent as if no drawings or details at all had been submitted.

The Contractor shall prepare composite drawings and installation layouts, when required to solve tight field conditions. Such drawings shall consist of dimensioned plans and elevations, and must give complete information particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interference, etc. These composite drawings and installation layouts shall be coordinated in
the field by the Contractor and his subcontractors for proper relationship to the Work of other trades, based on field conditions, and shall be checked and approved by them before submission to the DP for final review. The Contractor shall have competent technical personnel readily available for such coordinating and checking, as well as for supervision of field installation of work as per the drawings and installation layouts, which have been previously determined by him to be correct and carry the Design Professional's review stamp.

The submission of shop drawings (in either original submission or when resubmitted with corrections) shall constitute evidence that the Contractor has checked all information thereon, and that he accepts and is willing to perform the Work as shown in a workmanlike manner and in accordance with best standard practice. No claim for an extra shall be based on work shown on shop drawings.

The cost of any changes in construction due to improper checking and coordination by the Contractor shall be paid for by him, and the Contractor shall be responsible for all additional costs, including coordination.

Shop drawings shall clearly delineate the following information:

- DP name and ASU project number, project name and address.
- Drawing title, number, date and scale.
- Names of contractor, subcontractor and fabricator.
- Working and erection dimensions.
- Arrangements and sectional views.
- Necessary details, including complete information for making connections with other work.
- Kinds of materials and finishes.
- Descriptive names of materials and equipment, classified item numbers, and locations at which materials or equipment are to be installed in the Work shall be shown. The same reference identification as shown on the Contract Drawings shall be used.

If shop drawings show variations from contract requirements because of standard shop practice or other reasons, specific mention shall be made of such variations on the transmittal form.

Shop drawing review by the DP will be general. It shall not relieve the Contractor of responsibility for accuracy of such shop drawings, nor proper fitting, construction of work, furnishing of materials, or work required by contract documents and not indicated on shop drawings. Shop drawing approval shall not be construed as approving departures from contract requirements.

Review of shop drawings and schedules shall not relieve the Contractor from responsibility for any violation indicated on such drawings or schedules of local, county, state, or federal laws, rules, ordinances, or rules and regulations of commissions, boards or other authorities or utilities having jurisdiction.

When product data consisting of manufacturer's printed literature is required to be submitted to the DP it shall be submitted in original form. Any fading type of reproduction will not be accepted. A minimum of five each shall be required; two for ASU; two for the DP; and one to be returned to the Contractor, who shall submit whatever additional copies he requires for his distribution.

**Equipment Lists:** Six (6) copies of a complete list of all major items of mechanical, plumbing and electrical equipment and materials shall be submitted to the DP within thirty (30) days after award of contract. All items shall be submitted at one time in a neat and orderly manner. Partial lists will not be acceptable.
Submittals shall include the manufacturer’s specifications, physical dimensions and ratings of all equipment. Performance curves shall be furnished for all pumps and fans. Where the submittal sheet describes items in addition to that item being submitted, the submitted item shall be clearly marked on the sheet and superfluous information shall be crossed out.

The following list is representative of the type of equipment for which submittals are required:

- Heating equipment;
- Air conditioning equipment;
- Temperature controls;
- Grilles, registers, diffusers, extractors, access doors;
- Duct and piping insulation;
- Louvers;
- Filters;
- Piping accessories, valves, traps, expansion joints, pipe hangers, inserts, etc.;
- Thermometers and gauges;
- Pumps;
- Motors and starters;
- Electrical panels;
- Electrical switchboards;
- Electrical outlets, switches and devices;
- Lighting fixtures; and
- Plumbing fixtures and trim.

Equipment submittals shall be complete including space requirements, weight, electrical and mechanical requirements, performance data and supplemental information requested by the Design Professional.

**Samples:** No material shall be delivered to the building site prior to receipt of the DP’s written approval. Materials furnished shall be equal in every respect to approved samples and the work shall be executed in conformity therewith.

The General Contractor shall provide, at no cost to ASU, a materials sample room (or equivalent) within the construction trailer complex. This room or space shall be of sufficient size to effectively display all approved samples. This area will be utilized throughout the construction phase to ensure that products which are installed meet all of the requirements of these approved samples. The room shall be lockable and properly temperature controlled.

The approval or acceptance of samples will not preclude the rejection of any material upon the discovery of defects in same prior to the final acceptance of the completed work.

After a material has been approved, no change in brand or make will be permitted unless satisfactory written evidence is presented to and approved by the DP that the manufacturer cannot make scheduled delivery of approved material, or that material delivered has been rejected and substitution of suitable material is an urgent necessity, or that other conditions are apparent which indicate approval of such substitute materials to be in best interest of ASU.

All samples of materials requiring laboratory tests shall be submitted to a laboratory for testing not less than ninety (90) days before such materials are required to be used in the Work. All other samples shall be submitted for approval within thirty (30) days after signing of the Contract.

Samples shall be submitted in duplicate, except where greater or lesser number is specifically required by these specifications. Submittal shall be made only by the Contractor. All samples shall be shipped prepaid.

Samples will receive consideration only when accompanied by three (3) copies of the Contractor’s Transmittal Form, signed by the Contractor. The transmittal shall contain a list of samples, project name, contractor,
manufacturer, brand, quarry, quality, etc., job number specifications reference, ASTM or FS number (if any) and material being furnished.

Owner and Contractor Proforma Agreement xx-xxxxx.Contractor Rev. 12/2000, 11/01/01 56 Project Name Copies of the transmittal shall be enclosed with the samples. Any deviation from the contract requirements shall be so stated in the transmittal.

Each sample shall be labeled to indicate project, contractor, manufacturer, brand, quality, etc., job number, ASTM or FS number (if any).

Samples which are rejected by the DP must be resubmitted as soon as possible after notification or rejection, and shall be marked "Resubmitted Sample," in addition to the other information required.

The right is reserved to require submission of samples of any material or any material lists whether or not specifically mentioned in the specifications.

END OF SECTION
SECTION 01350 OPERATION AND MAINTENANCE DATA

Work Specified Herein: To aid in the continued instruction of operating and maintenance personnel, and to provide a positive source of information regarding the products incorporated in the Work, the Contractor shall furnish and deliver the data described in this section and in pertinent other sections of these specifications.

All submittals shall be made in strict accordance with the provisions of Section 01300. Required contents of submittals may also be amplified in the pertinent other sections.

In preparation of the data required by this section, the Contractor shall use only personnel who are thoroughly trained and experienced in operation and maintenance of the described items, completely familiar with the requirements of this section, and skilled in technical writing to the degree needed for communicating the essential data.

Submittals:

Preliminary: The Contractor shall submit one (1) copy of a preliminary draft of the proposed manual or manuals to the DP for review and comments.

Final: Unless otherwise directed in the pertinent other sections, or in writing by the DP, the Contractor shall submit four (4) copies of the final manual to the DP prior to indoctrination of operation and maintenance personnel.

Instruction Manuals

General: Where instruction manuals are required to be submitted under other sections of these specifications, manuals will be prepared in accordance with the following:

Format:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>(1)</td>
<td>Size: 22 cm by 28 cm (8-1/2&quot; by 11&quot;)</td>
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<tr>
<td>(2)</td>
<td>Paper: White bond, at least 9 kg (20-lb) weight.</td>
</tr>
<tr>
<td>(3)</td>
<td>Text: Neatly typewritten</td>
</tr>
<tr>
<td>(4)</td>
<td>Drawings: 28 cm (11&quot;) in height preferable; bind in with text; foldout acceptable; larger drawings acceptable, but fold to fit within the Manual and provide a drawing pocket inside rear cover or bind in with text.</td>
</tr>
<tr>
<td>(5)</td>
<td>Flysheets: Separate each portion of the manual with neatly prepared flysheets briefly describing contents of the ensuing portion; flysheets may be in color.</td>
</tr>
<tr>
<td>(6)</td>
<td>Binding: Use heavy-duty plastic or cardboard covers with binding mechanism concealed inside the manual; 3-ring binders will be acceptable; all binding shall be subject to the DP’s approval.</td>
</tr>
<tr>
<td>(7)</td>
<td>Measurements: Show the U.S. measurements plus the SI equivalents.</td>
</tr>
<tr>
<td>(8)</td>
<td>Covers: Provide front and back covers for each manual, using durable material approved by the DP and clearly identified on or through the front cover with at least the following information:</td>
</tr>
</tbody>
</table>
OPERATING AND MAINTENANCE INSTRUCTIONS

(Project Title)
(Building Number)
Arizona State University
(Name of Contractor)

(general subject of this manual)

(space for approval signature of the DP and approval date)

(9) Contents: Include at least the following:

(a) Neatly typewritten index near the front of the manual, giving immediate information as to location within the manual of all emergency data regarding the installation.

(b) Complete instructions regarding operation and maintenance of all equipment involved, including lubrication, disassembly, and reassembly, operating sequence, control diagrams, serial numbers, and factory order number.

(c) Complete nomenclature of all parts of all equipment.

(d) Complete nomenclature and part number of all replaceable parts, name and address of nearest vendor, and all other pertinent data regarding procurement procedure.

(e) Electrostatic copy of all guarantees and warranties issued.

(f) Manufacturers’ bulletins, cuts, and descriptive data, where pertinent, clearly indicating the precise items included in this installation and deleting, or otherwise clearly indicating, all manufacturers’ data with which this installation is not concerned.

(g) Reproducible control circuit plan for HVAC, heating systems, etc. and

(h) Such other data as required in pertinent other sections of these specifications.

END OF SECTION
SECTION 01400
QUALITY CONTROL

Work Specified Herein: The Contractor shall provide and maintain an effective quality control (CQC) program and perform sufficient inspections and tests of all items or the Work, including those of subcontractors, to ensure compliance with contract documents. Include surveillance and tests specified in the technical sections of the specifications. Furnish appropriate facilities, instruments, and testing devices required for performance of the quality control function. Controls must be adequate to cover construction operations and be keyed to the construction sequence.

Control of On-Site Construction, Preparatory Inspection: The Contractor shall perform this inspection prior to beginning work on any definable feature of the Work. The inspection shall include a review of contract requirements with the supervisors directly responsible for the performance of the Work; a check to assure that materials, products, and equipment have been tested, submitted, and approved; a check to assure that provisions have been made for required control testing; an examination of the Work area to ascertain that preliminary work has been completed; physical examination of materials and equipment to assure that they conform to shop drawings and data and that the materials and equipment are on hand.

Initial Inspection: The Contractor shall perform this inspection as soon as work commences on a representative portion of a particular feature of workmanship; a review of control testing for compliance with contract requirements.

Follow-up Inspections: The Contractor shall perform these inspections on a regular basis to assure continuing compliance with contract requirements until completion of that particular work.

Documentation of CQC Report: The Contractor shall identify the inspections heretofore specified and document in the CQC report with a brief description of the subject matter covered and the personnel involved.

Roofing/Water Proofing Requirements: All roofs and waterproofed components of the project shall be flood tested prior to substantial completion to demonstrate a watertight installation. The contractor shall submit to the Design Professional and owner's representative a sequenced plan and schedule for implementing flood testing. Where applicable, follow manufacturer's instructions and technical specifications requirements and include in the submittal. Testing shall encompass all components of the roof assembly, including flashings, hatches, skylights, equipment, mechanical and electrical penetrations, drains, etc. The Design Professional and Owner shall be notified at least four (4) days in advance of the contractor's start of roof/waterproofing testing. The contractor shall document the results of flood testing with written daily reports and photographs or video pictures. Any leaks or deficiencies shall be noted in the documentation. The contractor shall be responsible for correcting deficiencies and any damages to building components or contents resulting from testing. Roofs/waterproofing shall be re-tested until water tightness is demonstrated.

Control of Off-Site Operations: The Contractor shall perform factory quality control inspection for items fabricated or assembled off-site as opposed to "off-the-shelf" items. The CQC representative at the fabricating plant shall be responsible for release of the fabricated items for shipment to the job site. The CQC representative at the job site shall receive the item and note any damage incurred during shipment. The Contractor shall be responsible for protecting and maintaining the item in good condition throughout the period of on-site storage and during erection or installation.

Although any item found to be faulty may be rejected before it is used, final acceptance of an item by ASU is based on its satisfactory incorporation into the Work and acceptance of the completed project.

END OF SECTION
SECTION 01410
TESTING LABORATORY SERVICES

Work Specified Herein: This section outlines requirements covering testing laboratory services and inspection required during the course of construction of the project. Testing, when required, will be in accordance with pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.

ASU will select a pre-qualified independent testing laboratory and will pay for initial services of the testing laboratory as further described in this section.

The Contractor will cooperate with ASU's selected testing laboratory and all others responsible for testing and inspecting the Work.

Other testing and inspecting to be furnished by the Contractor will be provided as specified in this section and/or elsewhere in these specifications.

Payment for Testing: ASU will pay for initial testing services requested by ASU. When initial tests indicate noncompliance with the Contract Documents, the costs of initial tests associated with that non-compliance will be deducted by ASU from the contract sum. When initial tests indicate non-compliance with the contract documents, all subsequent retesting occasioned by the non-compliance shall be performed by the same testing agency and the costs thereof will be deducted by ASU from the contract sum.

Code Compliance Testing: Inspections and tests required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

Contractor's Convenience Testing: Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

Cooperation With Testing Laboratory: Representatives of the testing laboratory shall have access to the work at all times. The Contractor shall provide facilities for such access in order that the laboratory may properly perform its function.

Taking Specimens: Specimens and samples for testing, unless otherwise provided in the Contract Documents personnel will be provided by the testing laboratory. Deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

Schedules for Testing: By advance discussion with the testing laboratory selected by ASU, the Contractor shall determine the time required for the laboratory to perform its tests and to issue each of its findings, and provide the required time within the construction schedule. When changes of construction schedule are necessary during construction, the Contractor will coordinate such changes of schedule with the testing laboratory as required. When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking specimens due to incompleteness of the Work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by ASU.

Alternative Inspection Procedure: ASU shall have the right to require an alternative inspection procedure other than as specified when, in ASU’s judgment, other inspections are required to demonstrate compliance with the Contract requirements. Costs of such alternative inspections will be borne by ASU if products are found to comply; otherwise, costs shall be borne by the Contractor.

Testing Laboratory Services: The respective sections of these specifications contain detailed requirements for materials testing and inspections to be performed by an approved testing laboratory. All costs incurred for testing laboratory services will be paid by ASU at no cost to the Contractor, however, should retesting be required due to contractor's failure to comply with these specifications requirements the Contractor shall pay all costs of retesting.
The testing laboratory shall report the results of all tests, in writing, simultaneously to the following:

- DP  1 copy
- Contractor  2 copies
- ASU  1 copy

END OF SECTION
SECTION 01500 TEMPORARY FACILITIES & CONTROLS

Work Specified Herein. All labor, material, equipment and services necessary to furnish, erect and maintain temporary facilities and controls and perform temporary work required in the performance of the Contract, including those indicated and specified. The drawings identify storage areas allocated to the Contractor for the Work, and storage and office operations shall be limited to the defined areas.

Maintenance and Removal. The Contractor shall maintain temporary facilities and controls in a proper, safe operating and sanitary condition for the duration of the Contract. Upon completion of the Contract, all temporary facilities and controls shall be removed from the premises.

Utilities:

Electrical Power: Where commercial power is not readily available (APS or SRP), Arizona State University will provide a point of connection to Electrical Power for a temporary service drop (100 amps three phase 120/208). This should be to a pole located inside the contract limits, or other termination as arranged with the Director of Facilities Management. The contractor shall provide metered services from the service drop. Contractor's services shall conform to OSHA requirements. All services will be installed at the contractor's expense and contractor will be billed for electrical power consumed on both the temporary and permanent power systems until removal of the temporary and final acceptance of the project.

Water Services: Water services shall also be supplied by ASU for construction purposes only, however, if the contractor requires the use of water in quantities greater than that supplied by a single hose bib, he will be required to obtain a temporary meter from the City of Tempe and pay for any water used and all related charges.

Both utilities will be supplied at a point on the construction site agreeable to ASU. Extensions from the point of service will be by the Contractor.

All University utility services should be maintained at all times and connections or change shall be made only at such periods as would cause the least inconvenience to ASU.

General lighting, for construction purposes, shall be the responsibility of the Contractor and shall be maintained in all spaces not receiving sufficient daylight as required for safety. One-half watt per square foot for lighting shall be considered minimum.

Accessibility of Valves and Controls: No equipment that has to be operated or maintained, such as valves, traps, controls, unions, motors, etc., shall be placed in an inaccessible location.

Any dampers, controls, valves, expansion joints, or other apparatus which must of necessity be located in walls, above ceilings, etc., shall be provided with suitable access doors (fitting in a frame opening) which will permit proper operation and servicing. The door shall be as specified.

Potable Water: The Contractor shall supply adequate cool, pure drinking water with individual drinking cups or sanitary bubbler fountain for the use of employees on the project. The quality of the drinking water shall meet the standards for public water supplies of the Maricopa County Health Department.

Telephone: The Contractor shall provide and pay for installation of a job telephone, paying all local service charges involved, for the duration of the Contract. Long distance calls shall be paid for by the party making the call. A pay telephone is not acceptable.

Toilet Facilities: The Contractor shall provide proper sanitary and adequate toilet facilities for the use of all workmen employed on the project, located where directed, and shall enforce their use by all personnel on the Project. Toilets shall be enclosed and weatherproofed and kept in a sanitary condition at all times. Heating. Should it become necessary to do any work in the building, such as plastering, cement work, painting, etc., at times when the temperatures is below 40°, the Contractor shall provide temporary heat for such length of time as
deemed necessary for the protection of the Work. The Contractor shall pay all expenses for temporary apparatus, its installation, proper maintenance and operation and fuel.

Should temporary heat be required after the permanent heating system is installed and operating, this unit may be used, however, the Contractor shall pay all fuel costs and be responsible for the proper operation of the unit.

**Fire Protection:** The Contractor shall provide adequate fire extinguishers on the premises during the course of construction, of the type and sizes recommended by the NFPA to control fires resulting from the particular work being performed. Employees shall be instructed in their use. Extinguishers shall be placed in the immediate vicinity of the Work being performed, ready for instant use. In the use of especially hazardous types of equipment, such as acetylene torches, welding equipment, tar pots, kettles, etc., no work shall be commenced or equipment used unless fire extinguishers of an approved type and capacity are placed in the Working area and available for immediate use by the workmen using the above mentioned equipment.

Fire extinguishers shall be maintained throughout all accessible areas. Water and hose facilities shall be provided commensurate with construction progress. Chemical extinguishers and water barrels with round bottom pails shall be maintained on each floor at the landing of each complete and usable stairway or elevator lift; 5 round bottom sand pails hung on a cross arm and water and hose connections shall likewise be provided at all such locations. Approved 2-1/2 gallon foam type extinguishers shall be provided in the construction shed and also in the space where paint or oil, etc., is stored. Other special features of hazard shall be provided with special extinguisher protection as may be warranted.

**Temporary Use of Elevators:** If the Contractor and/or his subcontractors require or desire temporary use of an elevator for movement of employees only before the Work is completed, ASU shall make such car available.

**Temporary Enclosures, Barriers and Fences:** The Contractor shall provide and maintain all fences, barricades, lights, shoring and other protective structures or devices necessary for the safety of workmen, equipment, the public and property as required by state or municipal laws and regulations, and local ordinances, laws and other requirements of the county, state, and other authorities having jurisdiction with regard to safety precautions, operation and fire hazards.

The Contractor shall provide and maintain pumping facilities, including power, for keeping the site, excavations and structure free from accumulations of water at all times, whether from underground seepage, rainfall, drainage or broken lines.

The Contractor shall maintain provisions for closing and locking the building at such time as possible to do so.

The Contractor shall protect all door openings when so required with temporary batten doors, and cover windows and openings with suitable materials when weather or job conditions require.

The Contractor shall provide six foot (6') high woven wire temporary fencing around the construction area. The approval of the fence and its exact location will be made by ASU. Fencing shall be erected and secured in a manner to withstand the forces to which it may be subjected. Gates for access to the areas shall be located as required. All gates shall be closed and locked after normal working hours.

Equipment and vehicles shall be staged off malls and other areas of normal pedestrian access. When it is necessary to work in pedestrian areas, care shall be taken in positioning vehicles, equipment, fencing, barricades, etc., to not create tripping or other hazards for persons with visual or physical disabilities. Projections of materials or equipment between 20 inches and 80 inches above ground are hazards and, therefore, prohibited. The use of tape strung between barricades or other supports is not an allowable barrier to protect visually impaired persons. Continuous fencing or continuous flasher barricades are the only acceptable barriers.

**Temporary Partitions:** The Contractor shall provide temporary dust proof partitions consisting of 2" x 4" studs with 3/8" gypsum wallboard one side as indicated and required to separate construction areas from existing occupied spaces. The side of such partitions facing occupied space shall be taped, caulked, and painted. Doors in temporary partitions shall be adequately weatherproofed to minimize dust infiltration. The Contractor shall protect all elements of construction from any danger of damage from wind, rain, dust, frost, freezing temperatures, or other infiltration of weather.
Scaffold, Staging, Etc.: The Work under each section of these specifications shall include providing, installing, and maintaining all scaffold, staging, trestles, and planking necessary for the Work under each section in strict conformity with applicable laws and ordinances, and maintenance of same so as not to interfere with or obstruct work of other trades. Additionally, the Work under each section of these specifications shall include providing all forms of protection necessary to preserve the Work of other trades free from damage. These provisions shall be considered as though repeated under each separate section of these specifications.

Tree and Plant Protection: Existing or newly planted vegetation, shrubs, trees, sidewalks, paving, etc., on the site, shall, unless directly affected by the Work of this contract, be protected against damage of any kind. No diesel or gasoline engine shall be left running under trees. No vehicle shall be allowed to pass over the feeder root system within the drip line unless approved by ASU. The Work, storage and traffic areas shall be restricted to those areas immediately adjacent to the buildings. Damage of any kind caused by the Work of this contract shall be made good before final acceptance of the project. The contractor shall be required to maintain all trees, plants, shrubs, existing site improvements, etc. designated to remain within the project site.

Security: The Contractor shall provide such watchmen's service as necessary to protect ASU's interest during the progress of construction of the Project. The DP and ASU do not assume any responsibility, at any time, for the protection of the Project and premises or for loss of materials, from the time that the Contract operations have commenced until the final acceptance of the Work by ASU. If watchman service is deemed necessary by the Contractor, such protection shall be provided by the Contractor.

Noise, Debris and Dust Control: The Contractor shall exercise all possible care to control excessive noise and dust during the construction to keep these problems to a minimum. Traffic or construction areas shall be sprinkled with water or chemicals as required by ASU and in accordance with applicable county requirements. ASU shall be notified prior to using air compressors, jackhammers, etc., in sufficient time to permit removal of any occupants close enough to be affected by such disturbances. If at all possible, the normal course of operation of the University shall not be interrupted by unwarranted noise generated by the Contractor. Noisy equipment shall be screened with temporary enclosures to shield adjacent areas as much as possible. The University may require the Contractor to cease from or reschedule any activities that interrupt or disturb the normal course of operation of the University. The Contractor shall comply immediately with said request.

All debris, etc., shall be removed from all pipe chases or other such remote hidden spaces prior to closing of the space.

Consideration of Operation of ASU's Facilities: The Contractor's work shall be so executed as to provide safe and lawful ingress and egress to ASU's existing establishments at all times. Where construction work may interfere with ASU's operation, the Contractor shall make necessary arrangements in advance with ASU. Connections to existing facilities shall be requested four (4) days in advance in writing. Requests shall be directed by the Contractor to the office of the Director of Facilities Management, Arizona State University, Tempe, with a copy to the DP. Permission to make the requested connections will be made in writing, and will be arranged as nearly as possible to comply with the Contractor's request, but with first consideration for the University's requirements. No connections will be made until formal permission is granted. No existing valves or switches will be operated by the Contractor. The University will assign a man for this purpose.

Demolition of Existing Structures: Etc. All structures, equipment, and other items owned by Arizona State University which are scheduled for removal shall remain the property of the University. The manner of dismantling, moving, storing or disposal shall be as directed by ASU's representative with the cost being borne by the Contractor.

Project Identification: ASU will furnish and erect a project identification sign; four feet by eight feet, giving the name of the project, ASU Design Professional(s), engineers, (CM), and contractor. No other sign will be permitted on the project site except that permanently affixed to the contractor's vehicles and equipment, or needed to comply with safety regulations.

Field Office, and Storage Enclosures: The Contractor shall provide suitable temporary office facilities complete with telephone and furnishings, required for the Contractor's administration of the Work in such locations as approved by
ASU. Office space shall be kept clean by the Contractor.

The Contractor shall provide all storage enclosures required for the Contractor's operations.

Contractor Parking at the University: After award of a contract, but before start of the Work, the General Contractor shall contact the Parking Service Office for a determination of the area in which he will be allowed to park vehicles. This applies to both commercial and private transportation.

The Contractors are expected to provide parking for all construction equipment as well as private vehicles. This applies to both commercial and private transportation.

The Contractors are expected to provide parking for all construction equipment as well as private vehicles within the contract limits of the construction site.

If the Contract limits (fenced area) is too restrictive for the vehicles driven by construction workers, the University will designate another location for parking within the paid, permit lots only.

The Contractors shall purchase parking permits from the Parking Services Office for any and all vehicles needing parking outside of the contract limits (fenced area) during the length of the Contract. The Parking Services Office will determine the number of vehicles to be allowed to park adjacent to the job site, as defined by the Construction Documents; all other vehicles must park in Lot 59. Vehicles adjacent to the job site as defined by the Construction Documents will not be allowed to park on grass areas or in such a manner as to affect pedestrian traffic. Written permission must be obtained from the Parking Services Office (965-6406) prior to driving vehicle(s) on a pedestrian walkway. Failure to obtain permits or written permission will result in citations. The Contractor will assume final responsibility for any and all citations issued to its personnel and those of its subcontractors used during the Contract period. After exhaustion of the University appeal process, the University reserves the right to withhold amounts due from citations from the contractor's final payment.

Rules and procedures for parking are part of this contract and are available from the Parking Services Office, as are fees for purchase of permits.

Access to Project Site: Authorized representatives of the University (and representative of the government agency involved, if project is federally assisted) and the Arizona State Industrial Commission shall have ready access to the project at all times.

END OF SECTION
SECTION 01600 MATERIAL AND EQUIPMENT

Work Specified Herein: All requirements and procedures covering material and equipment to be utilized in the project work.

Facility and Equipment: The Contractor shall provide, install, maintain and operate a complete and adequate facility for the handling, execution, disposal and distribution of all material and equipment required for the proper and timely performance of all work connected with the Contract.

Foreign Material: Non-manufactured materials and products manufactured in the United States of America, chiefly from materials produced in the United States of America, shall be used under this contract in the construction of the Project, unless prior approval is obtained from ASU.

Measurements: Prior to ordering materials or starting work the Contractor shall verify all measurements at the site, and shall be held responsible for their accuracy. No extra compensation will be allowable for differences between actual dimensions and the measurements shown on the drawings.

Delivery and Storage of Materials: The Contractor shall deliver all manufactured materials in the original packages, containers or bundles (with the seals unbroken) bearing the name of identification mark of the manufacturer. However, materials shall not be delivered to nor stockpiled/stored at the site before they are needed. Fabrications shall be delivered in as large assemblies as practicable, and where specified to be shop-primed or shop-finished they shall be packaged or crated as required to preserve such priming or finish intact and free from abrasion.

Materials shall be stored in such manner as necessary to properly protect same from damage. Materials or equipment damaged by handling, weather, dirt or from any other cause will not be acceptable.

Material and equipment shall be stored so as to cause no obstructions and shall be stored off sidewalks, roadways and underground services. The Contractor shall be responsible for protecting all material and equipment furnished under the Contract.

When any room in the Project is used as a shop or store room, the Contractor shall be responsible for any repairs, patching or cleaning necessary due to such use. The location of such storage space shall be subject to approval of the DP.

Storage Facilities: The storage of material and construction equipment shall be as designated by ASU. Access to adjacent buildings shall be maintained free and clear at all times. Careful planning and scheduling of deliveries is mandatory. The Contractor shall assume full responsibility for properly storing and protecting materials and equipment. Equipment shall be completely protected with plastic film, unless otherwise directed by the DP. If required, storage facilities will be constructed. Ends of piping, conduit and openings to interior or equipment shall be sealed. Failure to adequately protect material and equipment to the satisfaction of the DP shall be sufficient cause for rejection of any damaged items.

Workmanship: Where not more specifically described in any of the various sections of these specifications, workmanship shall conform to all of the methods and operations of best standards and accepted practices of the trade or trades involved, and shall include all items of fabrication, construction or installation regularly furnished or required for completion (including any finish, and for successful operation as intended).

All work shall be executed by mechanics skilled in their respective lines of work.

When completed, all parts shall have been durably and substantially built and shall present a neat, workmanlike appearance.

Work, Materials, and Equipment: Unless otherwise specified all materials shall be new, of recent manufacture and of...
the best quality of their respective kinds. Labor shall be performed in a thorough and workmanlike manner and with all reasonable rapidity to the satisfaction of the DP.

Within two (2) weeks after signing the Contract the Contractor shall submit to the DP a list of all materials and equipment requiring shop fabrication or manufacture, accompanied by shop drawings if required. All manufactured equipment shall be listed by manufacturer's name, make or model number, size, capacity, etc.

The DP may require the Contractor to remove from the site material or work not specified. He may also require the Contractor to substitute satisfactory materials, without delay and at no added cost to ASU. The Work damaged or disturbed by the change will be the responsibility of the Contractor.

**Substitution of Materials Before Contract Award:** When a specific manufacturer, trade name or material is specified, or indicated, it is to establish a standard of quality and shall not be construed as limiting competition. If the bidder desires to use material of equal quality other than that specified, he shall request approval of such substitution in writing from the DP no later than eight (8) days prior to the stated date of bid opening as identified in the Construction Documents. Materials found acceptable for bidding will be approved by a duly authorized addendum. The decision of the DP regarding the approval of items for which substitution is requested shall be final.

Submittals for approval of substitute materials shall contain sufficient information, descriptive brochures, drawings, samples or other data as is necessary to provide direct comparison to the specified materials. Each submittal shall be well marked and identified as to the type and kind of items being submitted for approval. It is the sole responsibility of the Bidder to submit complete descriptive and technical information so that the DP can make proper appraisal. Lack of proper information will be sufficient cause for rejection. References to catalogs that the DP may or may not have, will not be accepted.

Substitutions of materials shall not be offered unless a thorough check is made of all related items and interferences, revised arrangements and other changes that may result. Proposed substitutions which will require substantial design revisions to the Construction Documents will not be approved.

If alternate materials are not so approved for the base bid, the Bidder may, at his option, offer alternate materials at the time of bidding. This offer shall be on the Bidder's letterhead and shall state the type of substitution in detail together with net addition to or deduction from the base bid or alternate. This offer of alternate materials which have not had prior approval will not be considered in award of the Contract, but may be considered after award of the Contract.

Award of the Contract in accordance with construction documents requires that the specified materials and equipment shall be furnished and installed.

Unless specifically submitted and approved in accordance with above, substitutions will not be allowed.

**Substitution of Materials After Award of Contract:** Substitution of products will be considered after award of contract only under one of the following conditions:

(a) When the specified product is not available, a proposed substitution will not be considered unless proof is submitted that firm orders were placed within ten (10) days after review by the DP of the item listed in the specifications or the unavailability is due to a strike, lockout, bankruptcy, discontinuance of the manufacture of a product, or natural disasters.

(b) When a guarantee of performance is required and, in the judgment of the Contractor, the specified product or process will not produce the desired results.

Request for such substitution shall be made in writing to the DP within ten (10) days of the date that the Contractor ascertains he cannot obtain the material or equipment specified, or that the performance cannot be guaranteed.

**Procedures Respecting Substitution:** The Contractor shall accompany any request for substitution with such drawings, specifications, samples, manufacturer's literature, performance data, and other information necessary to describe and evaluate the proposed substitution completely. The burden of proof shall be on the Contractor. Permission to make any substitution after award of the Contract shall be effected by a change order. It shall not relieve

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Owner and Contractor  
Rev. 12/2005  
xx-xxxxx.Contractor  
Project Name
the Contractor, any subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist in the substituted product or for any departures or deviations from the requirements of the contract documents as modified by such change order. Except as otherwise expressly specified by the Contractor in his request for substitution and expressly approved in such change order, the Contractor shall be deemed to warrant by his request that the proposed substitute product will satisfy all standards and requirements satisfied by the originally specified product and the Change Order shall not be deemed to modify the contract documents with respect thereto.

If any substitution will affect a correlated function, adjacent construction, or the Work of other trades or contractors, the necessary changes and modifications to the affected work shall be considered as an essential part of the proposed substitution, to be accomplished by the Contractor without additional expense to ASU if and when accepted.

Material Reference Standards: Where material is specified solely by reference to standard specifications the Contractor shall, if requested by the DP submit to the DP, for his approval, data on all such material proposed to be incorporated into the Work listing the name and address of the vendor, the manufacturer or producer, and the trade or brand names of such materials.

END OF SECTION
Work Specified Herein: All requirements and procedures for submittal of pertinent data relating to closing out the project upon completion of the Project Work. Detailed instructions elsewhere in these specifications may require that certain items listed herein be submitted prior to completion of the Project. This section is complementary to the General Conditions or Supplementary General Conditions.

Final Payment: Receipt and approval of all items specified in this section is a prerequisite for final payment.

Record As-Built Drawings: The Contractor shall provide record drawings which shall clearly show all differences between the Contract Work as drawn and as installed for all work, as well as work added to the Contract which is not shown on the Contract Drawings.

Maintenance Manual and Operating Instructions: The Contractor, upon completion of the installation of all work specified shall furnish four (4) complete bound copies of operating maintenance instructions and parts lists for all materials and equipment, including electrical and control items, being supplied.

Operating instructions shall include complete operating sequence, control diagrams, description of method of operating machinery, machine serial numbers, factory order number, parts lists, instruction books, supplier's phone numbers and addresses and individual equipment guarantees for each system. Parts lists shall be complete in every respect, showing all parts and part numbers for ready reference.

The Contractor shall assemble maintenance manual and operating instructions in hardback three-ring binders. All material contained therein shall be suitably labeled and indexed for ready reference.

Upon completion of the Project Work, the Contractor shall submit one copy of the maintenance manual and operating instructions to the DP for approval. Upon receipt of notice of approval the additional copies shall be delivered to the DP.

Small Business Subcontract Report: The Contractor shall submit to the Owner a final subcontractor report that shall document the value of the subcontractors to small businesses, minority owned businesses, and women owned businesses.

Guarantees: The Contractor shall submit all required guarantees to the DP. Written guarantee shall be provided in accordance with Article 13.2.2 of the General Conditions. In addition, the Contractor will provide all written guarantees or certificates required as specified in these specifications.

Substantial Completion: When the Contractor, with the concurrence of the Design Professional, DP, and Construction Manager, CM, if any, agree that the Project, or a designated portion thereof is complete, he shall so notify the DP and Owner in writing. The written notification shall request a final inspection by Owner, DP, and CM, if any, giving the proposed date of the inspection. The written notification shall be given at least three days prior to the requested inspection date.

The inspection of the Project on the proposed date is contingent upon the DP and CM, if any, agreeing that the project is in fact "Substantially Complete" and ready for such an inspection.

A designated portion of the Project may be inspected only with prior approval of the Owner, and if it is in the best interests of the Owner. If designated portions of the work are inspected each portion shall have its own Certificate of Substantial Completion issued and numbered consecutively. Attached to each Certificate shall be the deficiency list for that area.

The inspection of the Project, or designated portion thereof, shall consist of the Contractor preparing a deficiency list (Punch List) of all items to be completed or corrected. Any deficiencies identified by the Owner's Facilities Management prior to or during the inspection shall also become a part of the deficiency list. The failure to include any items on such...
a list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents.

By submitting a request for a Certificate of Substantial Completion, the Contractor must also certify that the remaining items on the deficiency list generated will be completed within the time limit specified in the Contract. The DP shall prepare the Certificate and establish the time in days within which the Contractor shall complete the items listed therein. The Contractor will incur liquidated damages, per the contract, for failure to complete the deficiency list items within the time established on the Certificate of Substantial Completion.

The Contractor shall plan and show on his construction schedule the period of time required to complete all inspections and "Punch list work." An amount equal to two time (200%) the value of uncompleted deficiency list items, as determined by the Owner, shall be withheld from the Contractor until all deficiency items are complete.

In addition to the completion of the deficiency list items the Contractor must also complete all other contractor requirements including submittals. The Owner shall be the final judge of whether the terms of the contract have been met and the Project is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

If the Project is complete and all Punch List items are completed or corrected, the DP will issue a final "Certificate of Payment."

After completion of the procedures outlined above the Contractor shall submit his final application for payment in accordance with the agreement, the General Conditions and Supplementary General Conditions.

Final Checkout of Structure and Equipment with ASU: All air handling filters, and other filters, in the building shall be replaced new, as a Contractor expense, before final payment, at a mutually agreeable time with ASU Facilities Management. Paper filters are not acceptable. All filters shall be installed with SMACNA approved glides and carriers, and be readily accessible for maintenance.

Before acceptance and final payment, at a time arrived at with ASU, a complete checkout and test shall be made of all mechanical and electrical systems, architectural and structural devices, etc., with ASU. For this purpose, each trade concerned shall provide a skilled operating engineer or technician for a period of time as required by ASU. This person, together with selected operating personnel, shall test all systems and devices and demonstrate the complete operation and required maintenance of each.

Date of Completion and Beginning of Warranty Period: The date of completion and beginning of the warranty period shall be the date established by ASU. This date will represent the completion date for all phases of the Project, irrespective of early completion by some subcontractors of their work, or occupancy by ASU prior to completion of some portions of the building. The Contractor will be notified by ASU, in writing, of this established date.

END OF SECTION
SECTION 01710 CLEANING

Work Specified Herein: This section outlines requirements for cleaning of the Project Work. This section is complementary to the General Conditions and Supplementary Conditions; and nothing herein shall be considered to waive any requirements of the General Conditions or Supplementary General Conditions.

Requirements of Regulatory Agencies:

Safety and Insurance Standards: The Contractor shall maintain the Project in accordance with the following safety and insurance standards:

State Industrial Commission (of Arizona); and
OSHA.

Fire Protection: Volatile waste will be stored in covered metal containers, and removed from premises daily.

Pollution Control: Clean up and disposal operations will be conducted to comply with local ordinances and antipollution laws. Burning or burying of rubbish and waste material on the Project site is not permitted. Disposal of volatile fluid waste (such as mineral spirits, oil, or paint thinner) in storm or sanitary sewer systems or into streams or waterways is not permitted.

Cleaning Material: Only cleaning materials recommended by the manufacturer of the surface to be cleaned shall be used. Cleaning materials shall be used only on surfaces recommended by cleaning material manufacturer.

During Construction: During the construction period, the material to be used in the Work shall be kept in an orderly manner, neatly stacked or piled.

All refuse, rubbish, scrap materials, and debris caused by operations shall be cleaned up daily, to the end, that at all times, the site of the Work shall present a neat, orderly and workmanlike appearance. Dusty debris shall be sprinkled with water to the satisfaction of ASU.

The Contractor shall provide for the disposal of all waste products, trash, debris, etc., and make the necessary arrangements for legal disposal of the same off the site. Rubbish shall never be thrown from windows or other parts of building. Waste materials shall be lowered in a controlled manner with a minimum of handling.

The Contractor shall remove all surplus material, false work, temporary structures, including foundations thereof, plants of any description and debris of every nature resulting from operations, and put the site in a neat, orderly condition.

Interior building areas shall be vacuum cleaned when ready to receive finish painting and vacuum cleaning shall continue on an as needed basis until building is ready for acceptance.

Cleaning operations shall be scheduled so that dust and other contaminants resulting from the cleaning process will not fall on wet, newly painted surfaces.

The Contractor shall provide trash gondolas or containers for use by all trades.
Final Cleaning: The Contractor shall use experienced workmen, or professional cleaners for final cleaning.

Besides general broom cleaning, the following special cleaning for all trades shall be done at the completion of the Work:

- Remove putty stains from glass; wash, polish same, inside and outside. Exercise care not to scratch glass.
- Remove marks, stains, fingerprints, other soil, dirt from painted, decorated, or stained work.
- Clean, polish and wax woodwork.
- Clean and polish hardware for removal of stains, dust, dirt, paint and the like.
- Remove spots, soil, paint from tile and similar work; wash same.
- Clean fixtures, equipment; remove stains, paint, dirt, and dust.
- Remove temporary floor protections.
- Clean and polish all floors.
- Remove temporary protections at the site.
- Clean exterior and interior metal surfaces, including doors and windows, of oil, stains, dust, dirt, paint and the like.
- Clean and vacuum all carpeted areas.
- Make buildings ready for occupancy in all respects. Lay heavy building paper in main circulation areas to protect the floors until final inspection and acceptance.

All existing improvements, inside or outside the property which are disturbed, damaged or destroyed by the Work under the Contract shall be restored to the condition in which they originally were, or to the satisfaction of ASU.

END OF SECTION
SECTIoN 01720
PROJECT RECORD DOCUMENTS

Work Specified Herein: Throughout the progress of the Work, the Contractor shall maintain an accurate record of all changes in the contract documents, as described below.

Accuracy of Records: Thoroughly coordinate all changes within the record documents, making adequate and proper entries on each page of specifications and each sheet of drawings and other documents where such entry is required to properly show the change. Accuracy of records shall be such that future search for items shown in the contract documents may reasonably rely on information obtained from the approved record documents.

Timing of Entries: Make all entries within 24 hours after receipt of information.

General: The DP's approval of the current status of record documents will be a prerequisite to the DP's approval of requests for progress payment and request for final payment under the contract.

Progress Submittals: Prior to submitting request for final payment, submit the final record documents to the DP and secure his approval.

Use all means necessary to maintain the job set of record documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of the loss of recorded data, use all means necessary to secure the data to the DP's approval; such means shall include, if necessary in the opinion of the DP, removal and replacement of concealing materials and, in such case, all replacements shall be to the standards originally specified in the contract documents.

Maintenance of Job Set:

Identification: Immediately upon receipt of the job set described above, identify each of the documents with the title RECORD DOCUMENTS - JOB SET.

Preservation: Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the DP.

Do not use the job set for any purpose except entry of new data and for review by the DP, until start of transfer of data to final record documents.

Maintain the job set at the site of the Work.

Making Entries on Drawings: Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by note and by graphic line, as required. Date all entries. Call attention to the entry by a "cloud" around the area or areas affected. In the event of overlapping changes, different colors may be used for each of the changes.

Making Entries on Other documents: Where changes are caused by directives issued by the DP, clearly indicate the change by note in ink, colored pencil, or rubber stamp.

Where changes are caused by the Contractor originated proposals, approved by the DP, including inadvertent errors by the Contractor which have been accepted by the DP, clearly indicate the change by note in erasable colored pencil.

Make entries in the pertinent documents as approved by the DP.
Conversion of Schematic Layouts: In the most cases on the drawings, arrangement of conduits and circuits, piping, ducts, and other similar items, is shown schematically and is not intended to portray precise physical layout. Final physical arrangement is as determined by the Contractor, subject to the DP's approval. However, design of future modifications of the facility may require accurate information as to the final physical arrangement of items that are shown only schematically on the drawings.

Show on the job set of record drawings, by dimension accurate to within one inch (1"), the centerline of each run of items such as are described above. Clearly identify the item by accurate note such as "cast iron drain," "galv. water," etc. Show, by symbol or note, the vertical location of the item (under slab, in ceiling plenum, exposed, etc.). Make all identification sufficiently descriptive that it may be related reliably to the specifications.

The DP may waive the requirements for conversion of schematic data where, in the DP's judgment, such conversion serves no beneficial purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the DP.

Timing of entries: Be alert to changes in the Work from how it is shown in the contract documents. Promptly, and in no case later than 24 hours after the change has occurred and been made known to the Contractor, make the entry or entries required.

Accuracy of Entries: Use all means necessary, including the proper tools for measurement, to determine actual locations of the installed items.

Final Record Documents:

General: The purpose of the final documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of design to proceed without lengthy and expensive site measurement, investigation, and examination.

Review and Approval: Submit the completed total set of record documents to the DP. Participate in review meeting or meetings as required by the DP, make all required changes in the record documents, and promptly deliver the final record documents to the DP.

Changes Subsequent to Acceptance: The Contractor shall have no responsibility for recording changes in the Work subsequent to acceptance of the Work by ASU, except for changes resulting from replacements, repairs, and alterations made by the Contractor as part of his guarantee.

Record As-Built Drawings: The Contractor shall provide record drawings which shall clearly show all differences between the Contract Work as drawn and as installed for all work, as well as work added to the Contract which is not shown on the contract drawings.

The Contractor shall maintain a set of record drawings at the job site. These shall be kept legible and current and shall be available for inspection at all times by the DP and ASU. Show all changes in the Contract Work, or work added, on these record drawings in a contrasting color, including work changed by addendum or bulletin.

Prepare separate sets of record drawings for the architectural, heating, air conditioning, plumbing and electrical work.

The Contractor shall submit with the monthly pay request, as-built drawings each month to the DP. The DP shall keep and update the master record as-built drawings on a monthly basis.

In showing changes in the Work, or added work, use the same legends as were used on the Contract Drawings. Indicate exact locations by dimensions and exact elevations given in job datum, by depth. Give dimensions from a permanent point. Give elevations to sewer and storm drainage lines to the invert elevation. Mechanical and electrical record drawings shall indicate exact routing of all piping, duct work, power and control wiring, etc., location and function of all controls and whether manual or automatic and normal amperage readings for all motors taken at the equipment under normal load conditions, final air quantities at each air outlet and at each air return.
Record drawings shall contain the names, addresses and phone number of the Subcontractors; and shall be signed by the Contractor.

Upon completion of the Project Work, submit the record drawings to the DP for approval.

The DP shall approve the record drawings, and he shall be the sole judge of the acceptability of these drawings.

END OF SECTION
SECTION 01800
ALTERATIONS

Work Specified Herein: Perform alterations and related work as shown or specified and in accordance with requirements of the Contract Documents.

Scheduling: Before commencing any alterations or demolition work, the Contractor shall submit for review by the DP and approval of ASU, a schedule showing the commencement, the order, and the completion dates for the various parts of this work.

Before starting any work relating to existing utilities (electrical, sewer, water, heat, gas, fire lines, etc.) that will temporarily discontinue or disrupt service to the existing building, the Contractor shall notify the DP and ASU seventy-two (72) hours in advance and obtain ASU's approval in writing before proceeding with this phase of the Work.

Protection: The contractor shall:

- Make such explorations and probes as are necessary to ascertain any required protective measures before proceeding with demolition and removal. Give particular attention to shoring and bracing requirements so as to prevent any damage to existing construction.
- Provide, erect, and maintain catch platforms, lights, barriers, weather protection, warning signs, and other items as required for proper protection of the workmen engaged in demolition operations, occupants of the building, public, and adjacent construction.
- Provide and maintain weather protection at exterior openings so as to fully protect the interior premises against damage from the elements until such openings are closed by new construction.
- Provide and maintain temporary protection of the existing structure designated to remain where demolition, removal and new work is being done, connections made, materials handled, or equipment moved.
- Take necessary precautions to prevent dust and dirt from rising by wetting demolished masonry, concrete, plaster, and similar debris. Protect unaltered portions of the existing building affected by the operations under this section by dust proof partitions and other adequate means.
- Provide adequate fire protection in accordance with local Fire Department requirements.
- Will not close or obstruct walkways, passageways, or stairways without the authorization of the DP. Do not store or place materials in passageways, stairs, or other means of egress. Conduct operations with minimum traffic interference.
- Be responsible for any damage to the existing structure or contents of the insufficiency of protection provided.

Workmanship: Demolition, removal, and alteration work shall be as shown on the drawings. The Contractor shall perform such work required with due care, including shoring, bracing, and so on. The Contractor shall be responsible for any damage that may be caused by such work to any part or parts of existing structures or items designated for reuse. Patching, restoration, and new work shall be performed in accordance with applicable technical sections of the specifications.

Materials or items designated to become the property of ASU shall be as shown on the drawings. Such items shall be removed with care and stored in a location at the site to be designated by ASU.

Material or items designated to be reinstalled shall be as shown on the drawings. Such items shall be removed with care under the supervision of the trade responsible for reinstallation; protected and stored until required. Replace material or items damaged in its removal with similar new material.

Materials or items demolished and not designated to become the property of ASU or to be reinstalled shall become the property of the Contractor and shall be removed from ASU's property.

The Work shall be executed in a careful and orderly manner, with the least possible disturbance to the public and to the occupants of the building.
In general, masonry shall be demolished in small sections. Where necessary to prevent collapse of any construction, install temporary shores, struts, or bracing.

Where alterations occur, or new and old work join, cut, remove, patch, repair, or refinish the adjacent surfaces or so much thereof as is required by the involved conditions, and leave in as good a condition as existed prior to the commencing of the Work. The materials and workmanship employed in the alterations, unless otherwise shown or specified, shall conform to that of the original work. Alteration work shall be performed by the various respective trades that normally perform the particular items of work.

New and adjacent existing surfaces shall be finished as specified for new work. Clean existing surfaces of dirt, grease, loose paint, and so on, before refinishing. Where existing equipment and/or fixtures are indicated to be reused, repair such equipment and/or fixtures and refinish to put in perfect working order. Refinish as directed.

Cut out embedded anchorage and attachment items as required to properly provide for patching and repair of the respective finishes.

Confine cutting of existing roof areas designated to remain to the limits required for the proper installation of the new work. Cut and fold back existing built-up roofing. Cut and remove insulation, and so on. Provide temporary weathertight protection as required until new roofing and flashings are installed. Consult ASU to ascertain if existing guarantee bonds are in force and execute the Work so as not to invalidate such bonds.

Cleaning Up: Remove debris as the Work progresses. Maintain the premises in a neat and clean condition.

END OF SECTION
SECTION 01900

SUSTAINABILITY

Arizona State University is dedicated to acquiring products and services that meet Sustainability requirements. For the purpose of judging Sustainability, the following description applies:

A process of current or developing business practices and technologies that restore and enhance the environment by supplying products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

END OF SECTION

SECTION 01901

ASU WEAPONS POLICY

ASU prohibits the use, possession, display or storage of any weapon, explosive device or fireworks on all land and buildings owned, leased, or under the control of ASU or its affiliated or related entities, in all ASU residential facilities (whether managed by ASU or another entity), in all ASU vehicles, and at all ASU or ASU affiliate sponsored events and activities. Notification by Contractor to all persons or entities who are employees, officers, subcontractors, consultants, agents, guests, invitees or licensees of Contractor ("Contractor Parties") of this policy is a condition and requirement of this Contract. Contractor further agrees to enforce this contractual requirement against all Contractor Parties. ASU’s policy may be accessed through the following web page:


END OF SECTION