SPECIFICATIONS

FOR

UNIVERSITY OF MARYLAND

BALTIMORE COUNTY CAMPUS

LIGHTING UPGRADE FOR DORMITORIES 1, 2, & 3

CONSULTING ENGINEERS:

MYERS ASSOCIATES, INC.
110 WEST ROAD, SUITE 125
TOWSON, MARYLAND 21204
(301) 337-9337

ISSUED BY:

CONSTRUCTION ENGINEERING

Representative:

Theo Clark - (301) 455-2101

September 6, 1991
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STATE OF MARYLAND
UNIVERSITY OF MARYLAND BALTIMORE COUNTY

SECTION 00100
INSTRUCTION TO BIDDERS

1. NOTICE TO BIDDERS

A. The Notice to Bidders, which may be published as an advertisement, contains a description of the proposed work, together with information to the bidder regarding availability of construction bid forms, plans and specifications, the nature of any proposal guarantee, and the reservation of the right of the University to reject any and all bids.

2. ISSUING OFFICE

A. Copies of the proposed Contract Documents may be obtained from the Issuing Office:

Mr. John Blecheisen, C.P.M., CPPO
The University of Maryland Baltimore County
Department of Procurement
Room 301A Administration Building
Baltimore, Maryland 21228-5398
(301) 455-2071

3. PRE-BID CONFERENCE

A. There will be a pre-bid conference held in conjunction with this bid. Attendance at the pre-bid conference is not mandatory. The conference will be held October 8, 1991 at 10:00 A.M. in the Board Room of the Physical Plant Building. (see Exhibit G for location). All interested Contractors are encouraged to attend in order to be able to better prepare acceptable proposals. Bidders are encouraged to carefully read the bid documentation before the pre-bid conference in order to be prepared to express your concerns at the conference. If your firm plans to send representatives, please call the issuing office by October 4, 1991.
4. **QUESTIONS AND INQUIRIES**

A. All contact between contractor and the University will be formally held at scheduled meeting or in writing through the Issuing Office. Questions and inquiries, in writing, will be accepted at the pre-bid conference. Written questions and inquiries subsequent to the pre-bid conference should be directed to the individual referenced in item 5 below. All such questions and inquiries must be received by the close of business **October 11, 1991**. Questions or inquiries may be sent via fax if received by no later then the date shown in this section. No questions and inquiries will be accepted after the deadline stated in this section.

5. **RECEIPT AND OPENING OF BIDS**

A. The University of Maryland Baltimore County (herein called "University") invites bids on the Construction Bid Form attached hereto as Attachment A, all blanks which must be appropriately filled in. Bids will be received only by the University Issuing Office.

B. All correspondence, questions; and inquiries with respect to any aspect of this solicitation must be directed in writing to the following: Mr. John Blecheisen, C.P.M. CPPO, phone (301) 455-2071, FAX (301) 455-1009.

C. In order to be considered, all bids must be signed, sealed, and delivered to the above address by no later than **October 22, 1991, 11:00 A.M.** FAX BIDS OR MODIFICATIONS TO BIDS WILL NOT BE ACCEPTED. The University may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may reject any and all bids. Any bid may be withdrawn or modified prior to the scheduled time for opening of bids or authorized postponement thereof. Any bid received after the time and date set for bid receipt will not be considered.

D. The bidder shall review all certificates and affidavits called for in the bid request (including Attachments C and D hereof) and the contract document; bidder should either execute or be prepared to execute them, as appropriate. In the event that they cannot be truthfully executed, the bidder shall also notify the University.

00100-2
E. The following is a list of Attachments and Exhibits which are included in this package. All Attachments A, B, C, D, and Exhibit A are required to be submitted with the bid.

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6. PREPARATION OF BID FORM

A. The bidder **shall** submit his bid upon the Construction Bid Forms furnished by the University.

B. The Bid Form shall be filled out in ink or typed. Any erasures or alterations shall be initialed by the signer in ink. Spaces left blank will considered as a zero value. Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, bidder’s address, and the name of the project for which the bid is submitted and the division of work. Forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

C. The bid, if submitted by an individual, shall be signed by the individual; if submitted by a partnership; it shall be signed by such member or members of the partnership having authority to bind the partnership; if submitted by a corporation, the same shall be signed by an officer, and attested by the corporate secretary or an assistant secretary. If not signed by an
6. PREPARATION OF BID FORM (Continued)

C. (Continued)

officer, as aforesaid, there must be attached copy of that portion of the By-Laws or a copy of a Board resolution, duly certified by the corporate secretary, showing the authority of the person so signing on behalf of the corporation.

7. CONSTRUCTION BID FORM

A. The Construction Bid Form is that form which is included in the contract documents (Attachment A) and which sets forth the costs for each division of work, solicited by the University. Construction Bid Forms shall be submitted as stated in the specifications.

B. All documents included in, bound or attached to the construction bid form are necessary parts of the bid and shall not be detached, separated or altered in any form.

8. POWER OF ATTORNEY

A. Attorneys-in-fact who sign bid bonds, contract bonds, and any other bonding documents must file with each document a certified and effectively dated copy of the power of attorney.

9. OBLIGATION OF THE BIDDER

A. At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the contract specifications, and other bid documents (including all addenda). The failure or omission of any bidder to examine any form, instruments, or document shall in no way relieve any such bidder from any obligation in respect to its bid.

10. EXAMINATION OF CONTRACT DOCUMENTS AND SITE INVESTIGATION

A. By submitting a bid, the Contractor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials,
10. EXAMINATION OF CONTRACT DOCUMENTS AND SITE INVESTIGATION
(Continued)

A. (Continued)

availability of labor, water, electric power, roads and
uncertainties of weather, river stages, tides or
similar physical conditions at the site, the
conformation and conditions of the ground, the
character of equipment and facilities needed
preliminary to and during prosecution of the work. The
contractor further acknowledges that he has satisfied
himself as to the character, quality and quantity of
surface and subsurface materials, which shall include
the presence of lead and requirements for its removal
and disposal, or obstacles to be encountered insofar as
this information is reasonably ascertainable from an
inspection of the site, including all exploratory work
done by the University as well as from information
presented by the drawings and specifications made a
part of this contract. Any failure by the contractor
to acquaint himself with the available information will
not relieve them from responsibility for estimating
properly the difficulty or cost of successfully
performing the work. The University is not responsible
for any conclusions or interpretations made by the
contractor on the basis of information made available
by the University.

11. BID SECURITY

A. When the total bid is in excess of $50,000.00 each
bidder must furnish a bid bond issued by a surety
company approved by the State of Maryland with his
construction bid form. The bond must be in an amount
not less than five percent (5%) of the amount of the
base bid and shall be submitted on a form provided by
the University.

B. Certified checks, cash, and other security set forth in
COMAR 21.06.07.01 are acceptable in lieu of a bid bond,
and subject to the same conditions.

12. UNIVERSITY’S RIGHT TO REJECT BIDS

A. The University reserves the right to reject any and all
bids or to accept any bid in the interest of the people
of the University of Maryland.
13. LICENSES, REGISTRATION AND QUALIFICATIONS

A. Bidders must be licensed as required by Construction Firm Law of Maryland (Article 56, Section 18d, Annotated Code of Maryland) and shall submit a Contractor Questionnaire if requested by the University (not included in these specifications).

B. The University reserves the right to require that the Contractor demonstrate that it has the skills, equipment and other resources to satisfactorily perform the nature and magnitude of work necessary to complete the projects within the established contract schedule.

C. The University may make such investigations as it deems necessary to determine the ability of the bidder to perform the work; the bidder shall furnish to the University all such information and data as requested by the University. The University reserves the right to reject any bid if the evidence submitted by, or investigation of such bidder fails to satisfy the University that the Bidder is qualified to carry out the contract and to complete the work. Conditional bids will not be accepted.

14. DISCREPANCIES

A. Should a bidder find discrepancies in the specifications or should he be in doubt as to the meaning of intent of any part thereof, he must, not later than ten (10) working days prior to the bid opening, request clarification from the university who will issue a written addendum. Failure to request such clarification is a waiver to any claim by the bidder for expenses made necessary by reason of later interpretation of the contract documents by the University.

B. Explanations desired by a prospective bidder regarding the Contract Specifications, and other Bid Documents shall be requested in writing, from the University no later than a date not less than ten (10) working days prior to the opening.

C. Oral explanations or instructions will not be binding; only written addenda are binding. Any addenda resulting from these request will be mailed to all listed holders of the Bid Documents no later than seven (7) working days prior to the bid opening. The bidder shall acknowledge the receipt of all addenda in the space provided on the Construction Bid Form.
15. MODIFICATIONS AND WITHDRAWAL OF BIDS

A. Withdrawal or modification to bids are effective only if written notice thereof is filed prior to the time of the bid opening and at the place specified in the Notice to Bidders. A notice of withdrawal or modification to a bid must be signed.

B. No modifications shall be accepted after the time for opening of the construction bid form.

16. BID/PROPOSAL AFFIDAVIT AND CONTRACT AFFIDAVIT

A. Bidders must read, and truthfully execute the Bid/Proposal and Contract Affidavits included in the construction bid package as Attachments B and C. If these affidavits are not included in the construction bid package, they can obtain from the Department of Procurement by contacting the person designated in the Issuing Office above.

17. FINANCIAL DISCLOSURE AFFIRMATION

A. Contractors providing material, equipment, supplies or services to the University of Maryland herewith must comply with section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland which requires that every business that enters into contracts, leases or other agreements with the State and receives in the aggregate $100,000.00 or more during a calendar year shall within 30 days of the time when the $100,000.00 is reached, file with the Secretary of State a list containing the names and addresses of its resident agent, each of its officers, and any individual who is a beneficial owner of 5 percent or more of the contracting business. This affirmation is included as a part of the Bid/Proposal Affidavit enclosed as Attachment B.

18. NON-COLLUSION AFFIRMATION

A. Bidders must read, and truthfully execute the non-collusion affirmation included as a part of the Bid/Proposal Affidavit Attachment B. If this certificate is not included, it may be obtained by contacting the person designated in the Issuing Office above.
19. PROCUREMENT AFFIRMATION

A. To satisfy the requirement of COMAR 21.08, the Bidder must complete this Affirmation which is included as a part of the Bid/Proposal Affidavit (Attachment B) and submit it with the bid if the bid is in writing and results from a written solicitation and provided that the bid totals $10,000.00 or more.

B. If the contractor cannot complete this affirmation, and debarment proceedings have not been instituted against the Bidder, the Bidder must indicate the reasons why the affirmation cannot be given, including the name(s) of the person(s) involved, their current position(s) and responsibilities with the Bidder, the activity set forth in the affirmation in which they were involved, and the details of their participation in the activity, including the name(s) of any entity involved and their position and responsibilities with the entity.

C. If the Bidder cannot give the affirmation, and debarment proceedings have been instituted against the Bidder to COMAR 21.08, the Bidder shall indicate the status of the proceedings.

20. PUBLIC INFORMATION ACT

A. Bidders should give specific attention to the identification of those portions of their construction bids which they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials, upon request, should not be disclosed by the University under the Maryland Public Information Act, Article 76A, 1 through 5 of the Annotated Code of Maryland.

21. AWARD AND EXECUTION OF CONTRACT

A. AWARD OF CONTRACT:

1. The award of the contract, if it is awarded, will be within the time specified in the Construction Bid form and will be to the responsible bidder submitting the lowest responsive bid. The successful bidder will be given a written notice of award stating that his bid, including applicable add or deduct alternates, has been accepted and that he, has been awarded the contract. The basis for award of alternates is set forth in Section 01020 "Alternates".
21. AWARD AND EXECUTION OF CONTRACT (Continued)

A. AWARD OF CONTRACT: (Continued)

2. The University reserves the right to cancel the award of any contract before the execution of the contract by all parties without any liability on its part.

3. The University reserves the right to apply any reciprocal preference for resident Bidders as set forth in Section 14-401 of the State Finance and Procurement Article-Annotated Code of Maryland, 1988 Edition.

B. EXECUTION OF CONTRACT

1. After a Notice of Award has been issued, the University shall forward the formal contract form to the successful bidder for execution. The bidder shall execute the contract form and return it with fully executed Payment and Performance Bonds, to the University within fifteen (15) days after receipt of same.

2. As prerequisite to signing the contract and prior to the expiration of the aforesaid fifteen (15) day period following notification of award, the bidder shall have furnished the following in the form and content required by these General Conditions:

- Performance and Payment Bonds (Instructions to bidders)
- Certificates of Insurance (General Conditions)
- Affirmative Action Plan (General Conditions).

3. After receipt of the properly executed contract form and payment and performance bonds, the University will execute the contract with in 90 days and forward the Contractor a copy. The specifications, terms and conditions, and requirements contained herein shall apply to each bid and shall be incorporated by reference in the contract documents. In the event the University fails to execute the Contract within 90 day period, the Contractor will have as its only remedies, the option to declare the contract terminated without any liability by the University or to accept an extended period for execution by the University.
22. **FAILURE TO EXECUTE CONTRACT**

A. Failure of the Contractor to execute the contract and file acceptable bonds within the time provided shall be just cause for the payment of liquidated damage guaranteed by the bid bond or other securities at an amount equal to the increased contract price paid by the University as a result of the execute the contract.

B. In the event of the damages sustained by the University exceed the amount of the bid security, the University reserves the right to proceed against the Contractor for the balance of its damages.

23. **PERFORMANCE AND PAYMENT BONDS**

A. Performance and Payment Bonds are required only when the amount of the initial award is in excess of $50,000.00.

B. Persons or firms performing construction contracts for the University of Maryland are not required to post payment bonds if the contract price is $50,000.00 or less. Sub-contractors and suppliers on such contracts should be aware that the normal protection such bonds offer to the sub-contractors and suppliers is not available on construction contracts where the amount of the contract is $50,000.00 or less.

C. The University will provide to the contractor for execution copies of the Performance Bond and Payment Bond. The Bonds must be executed and returned to the University. The Premium for the bonds shall be paid by the contractor.

D. The Bonds shall be in the full amount of the contract prices.

E. At the direction of the University, the contractor may be required to increase the amount of the bonds; for such additions, the contractor will be reimbursed by the University in the amount of the actual increased bond cost.

24. **CRITICAL PATH METHOD (CPM)**

A. CPM schedules shall be submitted by the Contractor. The University will instruct the Contractor as to the submission of CPM's.
25. MINORITY BUSINESS ENTERPRISE REQUIREMENTS
   A. To satisfy the requirement of COMAR 21.11.03 Minority Business Enterprise Policies, Bidders are responsible for complying with the requirements of Section 10 of the General Conditions.

26. TIME OF COMPLETION AND LIQUIDATED DAMAGES
   A. The work involved with this Contract will require careful scheduling so as not to interfere with normal University and building operations. See Sections 00700 para. 7.0, and Sections 01010, 01020, and 15000 for other references to schedule of work.

27. ADDITIONAL COPIES
   A. UMBC will issue one complete set of contract drawings at the fee noted in the original notice to bidders. Since UMBC prints only enough copies to furnish one set per bidder, bidders wishing additional sets or copies of individual sheets must make alternate printing arrangements from the documents purchased originally from UMBC. UMBC assumes no responsibility for claims of omissions when copies are reproduced.

END OF SECTION
SECTION 00250
SPECIAL CONDITIONS

1. GENERAL

Related Documents: The general provisions of the contract, including General Conditions and the Supplementary General Conditions, apply to the work specified in this section.

1.01 Scope

A. Inspection of the Site:

1. Prospective bidders are required to visit the site of the work in order to acquaint themselves as to site conditions and other problems incident to the prosecution of said work.

B. Office for the Contractor:

1. The Contractor shall provide and maintain a suitable office on the premises where permitted by the Owner and shall remove this office from the premises at completion of all work.

C. Sanitary Facilities:

1. The General Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of employees of all contractors and subcontractors as may be necessary to comply with the requirements and regulations of the State Department of Health or of other bodies or agencies having jurisdiction thereof. He shall permit no public nuisance.

D. Utilities:

1. Telephone: Contractor shall make his own arrangements to provide telephone, within office space, for use of persons working on the site. Long distance calls will be paid for by the person making the call. Contractor may receive telephone service through the campus Telecommunications Office at a nominal fee payable to the University.

2. Water and Electricity: Temporary connections and extensions shall be provided by the Contractor. Temporary lighting and power connections required for all construction shall be provided by the Contractor and shall meet all electric code requirements. The cost of the water and electrical services are to be paid by the Contractor until substantial completion.

E. Scheduling:

1. Coordination: The Contractor shall coordinate his work with the Owner, or his representative, and cooperate with him to minimize the interruptions to the Owner's work in progress.
2. General: In all areas, the Contractor shall schedule each phase of his work, demolition, installation, and other new work to minimize the date for beneficial occupancy.

F. Limit of Work:

1. The Contractor shall restrict his passage, transport, and other activities strictly to the areas of his work. The Contractor shall clearly indicate all off-limit areas to his personnel, and shall provide temporary barricades separating his work from the existing operating areas in the plant.

G. Salvage:

1. Materials from site not required for reuse shall become the property of Contractor and shall be removed promptly from site, unless otherwise noted by the University.

H. Parking and Storage:

1. The Contractor shall restrict his parking and storage to the area designated by the Owner or his representative.

I. Cleaning and Removal:

1. When, in the opinion of the Owner, at any time during the progress of or after completion of the work, it becomes necessary to do so, the General Contractor shall remove rubbish, etc., caused by all Contractors’ work, and shall leave the premises including adjacent area both public and private in a neat and clean condition insofar as the work covered by these specifications is concerned.

J. Protection of Existing Utilities, Lines and Structures:

1. Utilities, lines, and structures: The Contractor shall protect all existing utilities, lines, and structures encountered in the prosecution of the work from any damage and/or interruption of any utility service, whether such utilities, lines or structures are shown on the drawings or are omitted therefrom. Whenever, in the course of the work, the Contractor encounters any utilities, lines, or structures which are not shown on the drawings or are not correctly located thereon, he shall immediately stop all work adjacent thereto until such time as he has promptly notified the Owner and received detailed instructions as to the method of proceeding. If, at any time in the course of the work, the Contractor damages any utility, line, or structure (whether or not shown on the drawings) for any reason whatsoever, he shall immediately notify the Owner and he will issue detailed instructions as to the method of repair and/or restoration. Any damage to utilities, lines, or structures resulting in the course of the work from the fault or negligence of the Contractor or any person under his control (including subcontractors), shall, if requested by the Owner, be repaired immediately or restored promptly by the Contractor to the satisfaction of the Owner, at the
sole expense of the Contractor. The Contractor recognizes that, because of operational requirements, it may become necessary for such repair or restoration work to be performed by employees of Owner, or another contractor; and the Contractor agrees that upon a determination by the Owner, and upon notice thereof to the Contractor, Owner, or other Contractor shall be liable for all direct costs occasioned in the performance of the work.

K. Cooperation:

1. The Contractors shall provide cooperation with each other as well as with Contractor presently completing other construction work within the building.
SECTION 00300
SUBSTITUTIONS

1. GENERAL

1.01 In specifying materials for the Contract, three general procedures are used. The three classifications are as follows:

Group 1: Material or equipment specified without the phrase, "or equal". When material or equipment is specified by one or more brand names, the Contractor shall base his proposal on the cost of the brand name, or one of the brand names listed. No substitution for that item will be considered during the bidding period, but the Architect may, after the contractor has been selected, accept a substitution at his discretion on the basis of further consideration of all factors and the substitution reduces the contract price.

Group 2: When the material or equipment is specified with the phrase "...or equal..." after a brand name and other identifying information, it is intended that the brand name is used for the quality and performance and Contractor may base his bid proposal on any item which is in all respects equal to that specified and presents essentially the same appearance.

Group 3: When material is specified as complying with the requirements of published "Standard Specifications" of trade associations, ASTM, government specifications, etc., the Contractor shall base his proposal on any item which can be shown to comply in all respects to the referred to "Standard Specifications".

1.02 For materials or equipment in any of the above described three groups, it is the responsibility of Contractor to furnish evidence of compliance with required standards in the form of engineering data or calculations; results of tests conducted by independent testing laboratories; experience record of the material or equipment used under conditions similar to that proposed in the project; any other means required by the Architect to establish the fact that proposed item is equal to that specified. The furnishing of all such data will be at expense of the Contractor and without additional cost to Owner.

1.03 It is distinctly understood: (1) that the Architect will use his own judgment in determining whether or not any materials, equipment or methods offered in substitution are equal to those specified; (2) that the decision of the Architect on all such questions of equality is final; and (3) that all substitutions will be made at no increase in cost or a reduction of cost to the Owner.

1.04 Upon receipt of written approval from Architect, Contractor may proceed with substitution providing Contractor assumes full responsibility for and makes, at his own expense, any change or any adjustment in construction or connection with other work that may be required by the substitution of such materials, equipment or methods. In the event of any adverse decision by the Architect, no claim of any sort shall be made or allowed against Architect or Owner.

1.05 Should the Contractor desire to substitute another material for one or more specified by name, he shall apply, in writing, for such permission and state the credit or extra involved by the use of such material. The Architect will not
consider the substitution of any material different in type or construction methods unless such substitution effects a benefit to the Owner.

1.06 Contractor shall not submit for approval, materials other than those specified without a written statement that such a substitution is proposed. Approval of a "substitute material" by Architect or Engineer when the Contractor has not designated such material as a "substitute", shall not be binding on Owner, nor release Contractor from any obligations of his Contract, unless Owner approves such "substitution" in writing.

**End of Section 00300**
STATE OF MARYLAND
UNIVERSITY OF MARYLAND BALTIMORE COUNTY

SECTION 00500

ATTACHMENTS AND EXHIBITS

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Exhibit H  Long Form Contract (Sample Only)
Addendum 1  Mandatory Contract Provisions
CONSTRUCTION BID FORM

University of Md. Baltimore County
5401 Wilkens Avenue
Baltimore, Maryland 21228

Bid Due Date: Bid Due Time:

Gentlemen:

(The)

(to be filled in by bidding company)

hereby submits the following proposal for the ____________________

Theatre Renovation

Having carefully examined the "Information/Instructions to Bidders", the General Terms and Conditions of Contract, the entire proposal documents, specifications and Addenda Numbered ________________________, and having received clarification on all items of conflict or upon which any doubt arose, the undersigned proposes to furnish all labor, equipment, materials, etc., required by the documents for the entire work, all in strict accordance with the contract documents, for the stipulated sum of:

(Base Bid in Words)  $ (Figures)

Circle

Alternate No. 1 Add/Deduct $______

Alternate No. 2 Add/Deduct $______

Alternate No. 3 Add/Deduct $______

Alternate No. 4 Add/Deduct $______

Alternate No. 5 Add/Deduct $______

Alternate No. 6 Add/Deduct $______

SPECIAL TERMS AND CONDITIONS

A. Failure to properly and completely fill in all blanks may be cause for rejection of this proposal.

B. If the undersigned is notified by the University of Maryland of the acceptance of this proposal within 120 days after the above BID DUE DATE, he agrees to execute a contract for all or part of the above sum, and to guarantee the completion of work within the time period specified in the proposal documents.
C. Accompanying the Proposal is a fully executed proposal bond security in the amount of 5% of the Base Fee (When the base fee is $50,000.00 or more). Proposal bonds except those of the top three offerors, will be returned after the related contract has been executed.

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<tr>
<th>Construction Firm License No.</th>
<th>(Date Issued)</th>
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(Place of Issuance)

Federal Employer Identification No.  
(or Social Security No. if no F.E.I. No.)

**INDIVIDUAL PRINCIPAL**

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<tr>
<th>In Presence of Witness:</th>
<th>FIRM NAME</th>
<th>SIGNED</th>
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**CO-PARTNERSHIP PRINCIPAL**

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<th>(Name of Co-Partnership)</th>
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<th>TELEPHONE NO.</th>
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as to BY. (Partner)

as to BY (Partner)

as to BY (Partner)
CORPORATE PRINCIPAL

(Name of Corporation)

Attest:

ADDRESS

TELEPHONE No.

BY (President)

(Affix Corporate Seal)

The offeror represents, and it is a condition precedent to acceptance of this proposal, that the offeror has not been a party to any agreement to submit a fixed uniform price.

WITNESS:

(SEAL) Signature of Office and Title

(Sign for Identification)

SUBSCRIBED AND SWORN TO before me, a Notary Public of the State of ________________, County or City of ________________ this _______ day of ________, 19 ________.

Notary Public

My Commission Expires ____________________________.
BID/PROPOSAL AFFIDAVIT

A. AUTHORIZED REPRESENTATIVE

I HEREBY CERTIFY THAT:

I am the ______________________ and the duly authorized representative of _______________________ and that I possess the legal authority to make this Affidavit on behalf of myself and the vendor for which I am acting.

B. ANTI-BRIBERY AFFIRMATION

1. Except as described in paragraph 2 below, neither I, nor to the best of my knowledge, information, and belief, the above vendor, nor any of its officers, directors, or partners, nor any of its employees directly involved in obtaining contracts with the State or any county, bi-county, multicounty agency or subdivision of the State has been convicted of, or has pleaded nolo contendere to a charge of, or has during the course of an official investigation or other proceeding, admitted in writing or under oath acts or omissions committed after July 1, 1977, which constitute bribery, attempted bribery, or conspiracy to bribe under the provisions of Article 27 of the Annotated Code of Maryland or under the laws of any state or federal government.

2. State "none" or, as appropriate, list any conviction, plea, or admission described in paragraph 1 above, with the date; court, official, or administrative body; and the sentence or disposition, if any:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

C. NON-COLLUSION AFFIRMATION

I AFFIRM THAT neither I nor, to the best of my knowledge, information and belief, the above firm nor any of its other representatives I here represent have:

1. Agreed, conspired, connived or colluded to produce a deceptive show of competition in the compilation of the bid or offer being submitted herewith;

2. In any manner, directly or indirectly, entered into any agreement, participated in any collusion to fix the bid price or price proposal of the bidder or offeror herein or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the within bid or offer is submitted.

D. PROCUREMENT AFFIRMATION

I FURTHER AFFIRM THAT:

1. Neither the above business nor, to the best of my knowledge, information, and belief, any officer, controlling stockholder, partner, principal, or other person substantially involved in the contracting activities of the business has in the past five (5) years: (a) been convicted under state or federal statute of a criminal offense incident to obtaining or attempting to obtain or performing a public or private contract, fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property; (b) been found civilly liable under state or federal antitrust statutes for acts or omissions in connection with the submission of bids or proposals for a public or private contract; (c) been convicted of any violation of a state or federal antitrust statute; (d) been convicted under the provisions of Title 18 of the United States code for violation of the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§1961 et seq.; or (e) the Mail Fraud Act, 18 U.S.C. §§1341 et seq., for acts arising out of the submission of bids or proposals for a public or private contract; (f) been criminally convicted of conspiring to commit any act or omission that would constitute grounds for conviction or liability under any statute described in subsection (a), (b), (c), (d), or (e) above; or (g) admitted in writing or under oath, during the course of an official investigation or other proceeding, acts or omissions that would constitute grounds for conviction or liability under any statute described above. As the undersigned vendor was not founded or established or is not operated in a manner designed to evade the application or defeat the purpose of the Debarment Regulations, COMAR 21.08, is not currently suspended or debarred pursuant to COMAR 21.08 or by the action of any other public entity, and is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business.

2. (a) If the affirmation described in paragraph 1, above, cannot be given, and debarment proceedings have not been instituted against the business pursuant to COMAR 21.08, indicate the reasons why the affirmation cannot be given, including any conviction or admission described in paragraph 1, above, with the date, court and sentence or disposition, if any; the name(s) of the person(s) involved, and their current positions and responsibilities with the business; the activity specified in COMAR 21.08 in which each person was involved; and the details of the person's participation in the activity, including the name(s) of an entity involved and the person's positions and responsibilities with the entity. (Attach additional sheets as necessary).

(b) If the affirmation described in paragraph 1, above, cannot be given, and debarment proceedings have been instituted against the business pursuant to COMAR 21.08, indicate the status of such proceedings.

E. FINANCIAL DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT I am aware of and that the above firm will comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate $100,000 or more, shall within 30 days of the time when the aggregate value of these contracts, leases or other agreements reaches $100,000 file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.
F. POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT I am aware of and that the above firm will comply with the provisions of Article 33, Sections 30-1 through 30-4 of the Annotated Code of Maryland, which require that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies, or a political subdivision of the State during a calendar year under which the person receives in the aggregate $10,000 or more, shall, on or before February 1 of the following year, file the Secretary of State of Maryland certain specified information to include disclosure of political contributions in excess of $100 to a candidate for elective office in any primary or general election.

G. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contract is for a law enforcement agency and the agency head or the agency head’s designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency’s undercover operations.)

I FURTHER DECLARE AND AFFIRM as follows:

1. Terms defined in COMAR 21.11.08 shall have the same meaning when used in this certification.

2. By submission of its bid or offer, the vendor, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the vendor shall:

   a. Maintain a workplace free of drug and alcohol abuse during the term of the contract;

   b. Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the vendor’s workplace and specifying the actions that will be taken against employees for violation of these prohibitions;

   c. Prohibit its employees from working under the influence of drugs or alcohol;

   d. Not hire or assign to work on the contract anyone whom the vendor knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;

   e. Promptly inform the appropriate law enforcement agency of any drug-related crime that occurs in its workplace if the vendor has observed the violation or otherwise has reliable information that a violation has occurred;

   f. Establish drug and alcohol abuse awareness programs to inform its employees about:

      i. The dangers of drug and alcohol abuse in the workplace,

      ii. The vendor’s policy of maintaining a drug and alcohol free workplace,

      iii. Any available drug and alcohol counseling, rehabilitation, and employee assistance programs, and

      iv. The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;

   g. Provide all employees engaged in the performance of the contract with a copy of the statement required by §G(2)(b), above;

   h. Notify its employees in the statement required by §G(2)(b), above, that as a condition of continued employment on the contract, the employees shall:

      i. Abide by the terms of the statement, and

      ii. Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after the conviction;

      iii. Notify the procurement officer within 10 days after receiving notice under §G(2)(h)(2), above, or otherwise receiving actual notice of a conviction;

      iv. Within 30 days after receiving notice under §G(2)(h)(1), above, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:

         i. Take appropriate personnel action against an employee, up to and including termination, or

         ii. Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation programs; and

   (k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §G(2)(a)-(j), above.

3. If the vendor is an individual, the individual shall certify and agree, as set forth in §G(4), below, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or alcohol in the performance of the contract.

4. I acknowledge and agree that:

   a. I am aware of and that the above firm will comply with the provisions of Article 33, Sections 30-1 through 30-4 of the Annotated Code of Maryland, which require that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies, or a political subdivision of the State during a calendar year under which the person receives in the aggregate $10,000 or more, shall, on or before February 1 of the following year, file the Secretary of State of Maryland certain specified information to include disclosure of political contributions in excess of $100 to a candidate for elective office in any primary or general election.

   b. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland, any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland in respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above firm in respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

   c. I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: ___________________________
CONTRACT AFFIDAVIT

I HEREBY DECLARE AND AFFIRM that I am the ___________________________ and the duly authorized representative of ___________________________ (Name of Contractor) and that I possess the legal authority to make this Affidavit on behalf of myself and the Contractor for which I am acting.

2. CERTIFICATION OF CORPORATION REGISTRATION AND TAX PAYMENT

I FURTHER DECLARE AND AFFIRM that the Contractor named above is a (domestic ________ ) (foreign ________) corporation registered in accordance with the Corporations and Associations Article, Annotated Code of Maryland, and that it is in good standing and has filed all its annual reports, together with filing fees, with the Maryland State Department of Assessments and Taxation, and that the name and address of its resident agent filed with the State Department of Assessments and Taxation is:

Name:
Address:

(If not applicable, so state).

I FURTHER CERTIFY that the Contractor has paid or has arranged for payment of all taxes due to the State of Maryland and has filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Employment Security Administration, as applicable, and will have paid all withholding taxes due to the State of Maryland prior to final settlement.

3. CONTINGENT FEES

I FURTHER WARRANT that the Contractor has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, to solicit or secure that the Contract, and that the Contractor has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or any other consideration contingent on the making of the Contract.

4. BRIBERY

I FURTHER DECLARE AND AFFIRM that neither I, nor to the best of my knowledge, information and belief, the above Contractor, nor any officer, director or partner of the above Contractor, nor any employee of the above Contractor directly involved in obtaining contracts with the State of Maryland or any county or other subdivision of the State of Maryland, has been convicted of bribery, attempted bribery or conspiracy to bribe, nor has engaged in conduct, or by any acts or omissions, made admissions in writing or under oath during the course of an official investigation or other proceeding, since July 1, 1977, which would constitute an offense or offenses of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or the federal government except as herein expressly stated (if none so state):

As used herein, the word “convicted” includes an accepted plea of nolo contendere.

5. REPUBLIC OF SOUTH AFRICA/NAMIBIA

(Applicable to all contracts for finished supplies and to all other procurement contracts over $100,000.)

I FURTHER DECLARE AND AFFIRM as follows:

A. The Contractor is ________ (is not ________) doing business in or with the Republic of South Africa or Namibia as defined by State Finance and Procurement Article, §14-501, Annotated Code of Maryland, and is ________ (is not ________) knowingly subcontracting with an entity that does so.

B. In the conduct of any operations in the Republic of South Africa or Namibia, the Contractor and if applicable, the subcontractor, abides by the following principles:

(1) Maintains nonsegregation of the races in all eating, comfort, locker room, and work facilities;
(2) Promotes equal and fair employment practices for all employees;
(3) Provides equal pay for all employees doing equal or comparable work for the same period of time;
(4) Initiates and develops training programs that will prepare Blacks, Asians, and other nonwhites in substantial numbers for supervisory, administrative, clerical, and technical jobs;
(5) Increases the number of Blacks, Asians, and other nonwhites in management and supervisory positions; and
(6) Improves the quality of employees’ lives outside the work environment in such areas as housing, transportation, schooling, recreation, and health facilities.

C. I acknowledge that:

(1) This certification is provided in accordance with State Finance and Procurement Article, §§14-501 through 14-507, Annotated Code of Maryland; 
(2) Any representations set forth in this certification that are not true and correct to the best of my knowledge, information and belief, may result in criminal penalty; and
(3) The State may take any other appropriate action permitted by law.
6. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contractor is for a law enforcement agency and the agency head or the agency head's designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency's undercover operations.)

I FURTHER DECLARE AND AFFIRM as follows:

A. Terms defined in COMAR 21.11.08 Drug and Alcohol Free Workplace shall have the same meaning when used in this certification.

B. The contractor, if other than an individual, certifies and agrees that, with respect to its employees who will participate in the performance of the contract, the contractor shall:

(1) Maintain a workplace free of drug and alcohol abuse during the term of the contract;

(2) Publish a statement notifying the contractor's employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violation of these prohibitions;

(3) Prohibit the contractor's employees from working under the influence of drugs or alcohol;

(4) Not hire or assign to work on the contract anyone whom the contractor knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;

(5) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in the contractor's workplace if the contractor has observed the violation or otherwise has reliable information that a violation has occurred;

(6) Establish drug and alcohol abuse awareness programs to inform the contractor's employees about:
   (a) The dangers of drug and alcohol abuse in the workplace,
   (b) The contractor's policy of maintaining a drug and alcohol free workplace,
   (c) Any available drug and alcohol counselling, rehabilitation, and employee assistance programs, and
   (d) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;

(7) Provide all employees engaged in the performance of the contract with a copy of the statement required by §B(2), above;

(8) Notify its employees in the statement required by §B(2), above, that as a condition of continued employment on the contract, the employee shall:
   (a) Abide by the terms of the statement, and
   (b) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction;

(9) Notify the procurement officer within 10 days after receiving notice under §B(8)(b), above, or otherwise receiving actual notice of a conviction;

(10) Within 30 days after receiving notice under §B(8)(b), above, or otherwise receiving actual notice of a conviction, impose the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:
   (a) Take appropriate personnel action against an employee, up to and including termination, or
   (b) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and

(11) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §B(1)(10), above.

C. If the contractor is an individual, the individual shall certify and agree, that the individual will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance of the contract.

D. I acknowledge and agree that:

(1) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification;

(2) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default, under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and

(3) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in the suspension and debarment under COMAR 21.08.06.

I ACKNOWLEDGE THAT THIS CONTRACTOR'S AFFIDAVIT is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or the contract shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland and any office or agency of the State of Maryland, having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland in respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above Contractor in respect to (1) this Affidavit, (2) the Contract, and (3) other Affidavits comprising part of the bid or proposal documents associated with the Contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

By: __________________________
(Affiant)
ATTACHMENT - D

SUBCONTRACTOR LISTING

To: The University of Maryland Baltimore County Campus

Project Title:

I. Will the above title project require any subcontractors? (check one) _________yes _________no

II. If you answered yes to question number 1, fill out the remainder of this form and return it attached to your Bid Proposal form.

SUBCONTRACTOR'S LIST

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<tr>
<th>A. Portion and percentage of the work to be performed.</th>
<th>Subcontractor's Name, Address, and Telephone Number</th>
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6. 

USE ADDITIONAL SHEETS IF REQUIRED

The undersigned proposes to use the above subcontractors for portion of work stated. Any bids received without this subcontractor listing form completed will be deemed void and will be rejected.

Bidder Company Name: ________________________________

Signature: ________________________________

Title: ________________________________

END OF SUBCONTRACTOR LISTING
MBE UTILIZATION AFFIDAVIT

The undersigned as contractor does hereby make the following Affidavit.

I acknowledge the Minority Business Enterprise participation goal of ____________________________ for this contract with The University of Maryland Baltimore County and commit to make a good faith effort to achieve this goal.

I do solemnly declare and affirm under the penalty of perjury that the contents of the foregoing document are true and correct to the best of my knowledge, information, and belief.

_________________________________________  ________________________
Signature of Applicant                      Date

_________________________________________
Company Name

_________________________________________
Notary Public

My Commission Expires: ________________________

Sworn and subscribed
before me this __________________________
day of __________________________, 19___.
# UNIVERSITY OF MARYLAND

## SCHEDULE FOR PARTICIPATION OF MINORITY BUSINESS ENTERPRISE

1. **Prime Contractor - Name of Firm - Address (Number, Street, City, State, Zip):**  
   Telephone: Area Code ( )

2. **Project Location (Number, Street, City, State, Zip):**

3. **Project Number:**
   **Project Name:**

4. **Total Contract Dollar Amount: $**

5. **List the data requested for each minority firm in this project:**

   a. **Minority Firm:**
      
      | Name of Firm | Number | Street | City | State | Zip |
      |--------------|--------|--------|------|-------|-----|
      | Work or Service to be performed: |
      | Project Commitment Date: |
      | Project Completion Date: |
      | Agreed Dollar Amount: $ |
      | Percentage of Total Contract: % |

   b. **Minority Firm:**
      
      | Name of Firm | Number | Street | City | State | Zip |
      |--------------|--------|--------|------|-------|-----|
      | Work or Service to be performed: |
      | Project Commitment Date: |
      | Project Completion Date: |
      | Agreed Dollar Amount: $ |
      | Percentage of Total Contract: % |

   c. **Minority Firm:**
      
      | Name of Firm | Number | Street | City | State | Zip |
      |--------------|--------|--------|------|-------|-----|
      | Work or Service to be performed: |
      | Project Commitment Date: |
      | Project Completion Date: |
      | Agreed Dollar Amount: $ |
      | Percentage of Total Contract: % |

   d. **Minority Firm:**
      
      | Name of Firm | Number | Street | City | State | Zip |
      |--------------|--------|--------|------|-------|-----|
      | Work or Service to be performed: |
      | Project Commitment Date: |
      | Project Completion Date: |
      | Agreed Dollar Amount: $ |
      | Percentage of Total Contract: % |

6. **Minority Firms Total Dollar Amount: $**
   **Minority Firms Total Percentage: %**

7. **Remarks (Use Plain Bond for Additional Comments):**

8. **This Form Prepared By:**
   
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<th>First</th>
<th>Middle Initial</th>
<th>Last</th>
<th>Title</th>
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**Approved:** ☐ Yes ☐ No

Signature of Minority Business Enterprise Officer
UNIVERSITY OF MARYLAND
MINORITY CONTRACTOR UNAVAILABILITY CERTIFICATE

IT IS HEREBY CERTIFIED THAT THE FIRM OF

(Name of Firm)

(Number) (Street) (City) (State) (Zip) , on (Date)

CONTACTED THE MINORITY BUSINESS ENTERPRISE,

(Name of Minority Business)

(Number) (Street) (City) (State) (Zip)

SEEKING TO OBTAIN A BID FOR WORK/SERVICE IN RELATION TO PROJECT NUMBER __________ OR PROJECT NAME __________

2. LIST TYPE OF WORK/SERVICE REQUESTED:

3. INDICATE THE FORM OF BID SOUGHT.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID MINORITY BUSINESS IS EITHER UNAVAILABLE FOR THE WORK/SERVICE IN RELATION TO THE PROJECT NUMBER: __________, OR IS UNABLE TO PREPARE A BID FOR THE FOLLOWING REASON(S):

(Name: First-Middle-Last) (Title)

(Address Number Street)

(City State Zip)

(Signature Date)

4. IT IS HEREBY CERTIFIED THAT THE FIRM OF

(Name of Minority Firm)

(Number) (Street) (City) (State) (Zip)

WAS OFFERED AN OPPORTUNITY TO BID ON PROJECT NUMBER __________ ON __________ BY __________

>Title) (Firm Name)

THE ABOVE STATEMENT IS A TRUE AND ACCURATE ACCOUNT OF WHY THE FIRM OF __________

DID NOT SUBMIT A BID ON PROJECT NUMBER __________

(Name) (Title)

(Signature)

Phone No. __________
MINORITY BUSINESS AND GENERAL CONTRACTOR'S
STATEMENT OF INTENT

PROJECT NUMBER: ____________________________

PROJECT NAME: ____________________________

PROJECT LOCATION: _________________________

PROJECT AMOUNT $:

A. Name of Prime Contractor: ____________________________

B. Name of M.B.E.: ____________________________

1. Bonds - Amount and type required of MBE if any:

2. Work/Services to be performed by MBE:

3. MBE Commitment Date: ____________________________ Completion Date: ____________________________

4. Percentage of Project Amount: ____________________________

5. The above named MBE is:
   A. An Individual ☐
   B. A Partnership ☐
   C. A Corporation ☐
   D. Other ____________________________

The undersigned subcontractor will enter into a contract with ____________________________ for the work/service indicated above upon the prime contractor's execution of a contract with the University of Maryland. The undersigned sub-contractor is certified by the MBECC as a minority business enterprise, as of (Date) ____________________________ or has applied for certification as of (Date) ____________________________.

__________________________
Signature of Subcontractor

__________________________
Print/Type Name of Firm

__________________________
Number ____________________________ Street ____________________________

__________________________
City ____________________________ State ____________________________ Zip ____________________________ Date ____________________________

I agree to the Terms and Conditions stated above.

__________________________
Signature of Prime Contractor

__________________________
Print/Type Name of Firm

__________________________
Number ____________________________ Street ____________________________
MINORITY BUSINESS ENTERPRISE SELF-CERTIFICATION AFFIDAVIT

Company is at least 51% owned and is controlled by one or more of the following:

[ ] Black American  [ ] Hispanics
[ ] American Indians  [ ] Asian/American
[ ] Pacific Islanders  [ ] Women
[ ] Alaskan Natives  [ ] Physically or mentally disabled

1. Company Name: ____________________________________________

2. Mailing Address: ___________________________________________
   (Number)  (Street)  State: ___________________________  Zip Code: ________

3. City: _____________________________________________________

4. Company Contact Person: ___________________________________  Phone No.: (______)
   Title: ____________________________________________________

5. Type of Organization
   [ ] Individual (Sole Proprietorship)  [ ] Partnership
   [ ] Corporation  [ ] Joint Venture
   [ ] Association  [ ] Other ____________________________

6. Type of Business
   [ ] Wholesale Distributing  [ ] Manufacturing or Production
   [ ] Retail Dealer  [ ] Service Organization
   [ ] Contractor  [ ] Other ____________________________

7. Date Business Established (Month/Year): _______________________

8. Identify special capabilities (i.e., manufacturing specialties, plumbing, electrical, service, etc.) - OR describe functions.
   ______________________________________________________________
   ______________________________________________________________

9. List All Owners:

   Name ___________________________  Ethnic Origin/Race ___________________________  Percent Ownership ________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________

10. Has your firm applied for Minority Business Certification with the Maryland Minority Business Enterprise Certification Council?
    [ ] Yes  [ ] No; The Maryland Department of Transportation? [ ] Yes  [ ] No. If yes, what is the status? [ ] Pending, [ ] Denied, [ ] Certified - Certification No. ____________________________

11. Is this business and affiliate or subsidiary of another business? [ ] Yes  [ ] No
    I HEREBY AFFIRM THAT:

    (1) I am the ___________________________________________  Title ___________________________
    and the duly authorized representative of the firm of ___________________________
    whose address is ______________________________________________________________

    and that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting.

    (2) The Information which I provided in the foregoing Minority Business Enterprise Self-Certification Affidavit from my personal knowledge is complete, true and correct.

    (3) I have read and understand that Article 21, Subtitle 8-601 of the Annotated code of Maryland defines (1) "minority person" as a member of a socially or economically disadvantaged minority group, which for purposes of this section includes Blacks, (not of Hispanic origin), Hispanics, American Indians, Alaska Natives, Asians, Pacific Islanders, Women, and the physically or mentally disabled, and (2) "minority business" as any legal entity, other than a joint venture, organized to engage in commercial transactions which is at least 51 percent owned and controlled by a minority person.
SOLICITATION AFFIDAVIT

The undersigned as contractor does hereby make the following Affidavit.

In the solicitation of subcontract quotations or offers all Minority Business Enterprise (MBE) subcontractors were provided not less than the same information and amount of time to respond to the solicitations.

The solicitation process was conducted in such a manner so as to otherwise not place MBE subcontractors at a competitive disadvantage to non-MBE subcontractors.

I do solemnly declare and affirm under the penalty of perjury that the contents of the foregoing document are true and correct to the best of my knowledge, information, and belief.

________________________________________  ________________________
Signature of Applicant                  Date

________________________________________
Printed Name

________________________________________
Notary Public

My Commission Expires: ________________________

Sworn and subscribed
before me this ________________________

day of ________________________

19 ______.
UNIVERSITY OF MARYLAND
BALTIMORE COUNTY
DEPARTMENT OF PROCUREMENT
LONG FORM CONTRACT

THIS AGREEMENT made the ___________ day of ___________, Nineteen Hundred and ___________ by and between

________________________________________, herein called "Contractor", and the University of Maryland, Baltimore, Maryland 21228, herein called "Owner". Witnesseth, that the Contractor and Owner for the considerations here mentioned agree as follows:

Article 1. Scope of Project - The Contractor shall furnish all of the materials and perform all of the work shown on the drawings and described in the specifications entitled ______________________________ prepared by ______________________________ who (or his successor) is herein called the "Architect" or "Engineer"; and shall do everything required by this Agreement, the General Conditions of the Contract, and said specifications and drawings, all of which are made a part hereof and are referred to herein as "The Contract". There follows a list of said specifications and drawings:

Specifications:

Drawings:

Proposal:

Article 2. Time of Completion - The project shall be commenced ___________ and shall be substantially completed ___________.

Article 3. The Contract Price - The Owner shall pay the Contractor (subject to additions and deductions specified herein) as follows:

Article 4. Special Provisions:

Article 5. Manner of Payment - The Owner shall make payment on account of the
contract price, as follows:

On or about the ______ day of each month ______ percent of the value, based on the Contract prices, of labor and materials incorporated in the project and of materials suitable stored at the site thereof up to the ______ day of that month, as estimated by said Architect or Engineer, less the aggregate of previous payments; and upon substantial completion of the entire project, a sum sufficient to increase the total payment to ________ percent of the Contract price ________________________

Contractor’s Federal Tax Identification or Social Security No. ______________________

Invoices should be prepared in triplicate in the name of the University of Maryland, Department of Physical Plant, and should indicate thereon the contract number, and bear the following certification:

I/We certify that we have made payments from proceeds of prior payments, and/or that we will make timely payments from the proceeds of the progress or final payment now due, to subcontractors and suppliers in accordance with our contractual arrangements with them.

The contractor (or authorized representative) shall sign the original invoice only, indicating the title of the signer, and mail to:

Mr. William L. Glenn, Jr.
Assistant Director of Physical Plant
University of Maryland Baltimore County
Baltimore, MD 21228

Article 6. Acceptance and Final Payment - Final payment shall be due _____ days after substantial completion of the project, but not until the project has been full completed and the Contract fully performed. Upon receipt of written notice that the project is ready for final inspection and acceptance, said Architect or Engineer shall promptly inspect the same. When he finds the work and materials acceptable under the Contract and the Contract fully performed, and upon receipt of evidence satisfactory to him that all payrolls, material bills and other indebtedness connected with the project have been paid, said Architect, or Engineer shall promptly issue a final certificate, signed by him. Said certificate shall state that the Contract has been fully performed according to its terms and that the work performed and materials furnished thereunder have been accepted by the Architect or Engineer as being in accordance with the Contract; and shall set forth the balance found by said Architect or Engineer to be due and payable to the Contractor.
If after the project has been substantially completed, full completion is materially delayed through no fault of the Contractor, and said Architect or Engineer so certifies, the Owner shall, without terminating the Contract, pay the balance certified by the Architect or Engineer to be due for that portion of work fully completed and accepted. The terms and conditions of such certification shall be the same as those for final payment, above set forth, but payment pursuant thereto shall not constitute a waiver of claims.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first above written.

____________________  
CONTRACTOR

____________________  
(Witness)

____________________  
(Signature)

____________________  
Typed Name

____________________  
(Title)

University of Maryland
Baltimore County

____________________  
(Witness)

____________________  
(Signature)

____________________  
Typed Name

____________________  
(Title)

Approved as to legal form and sufficiency this __________ day of ________________, 19__: __________________________(Attorney)
MANDATORY CONTRACT PROVISIONS

1. NON-HIRING OF EMPLOYEES: No employee of the State of Maryland or any unit thereof whose duties as such employee include matters relating to or affecting the subject matter of this Contract shall, while so employed, become or be an employee of the Contractor.

2. DISPUTES: Unless a lesser period is provided by applicable statute, regulation, or the Contract, the Contractor must file a written notice of claim with the Procurement Officer within 30 days after the basis for the claim is known or should have been known, whichever is earlier. Contemporaneously with or within 30 days of the filing of a notice of claim, but no later than the date of final payment under the Contract, the Contractor must submit to the Procurement Officer its written claim containing the information specified in COMAR 21.10.04.02.

3. MARYLAND LAW: This Contract shall be construed, interpreted, and enforced according to the laws of the State of Maryland.

4. AMENDMENTS: This Contract constitutes the entire agreement between the parties and all other communications prior to its execution, whether written or oral, with reference to the subject matter of this Contract are superseded by this agreement. Any amendment to this Contract must first be approved in writing by the Procurement Officer, subject to any additional approvals required by State law. No amendments to this Contract shall be binding unless so approved and unless it is in writing and signed by the party to be charged.

5. NONDISCRIMINATION IN EMPLOYMENT: The Contractor agrees: (a) not to discriminate in any manner against an employee or applicant for employment because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, or physical or mental handicap unrelated in nature and extent so as reasonably to preclude the performance of such employment; (b) to include a provision similar to that contained in subsection (a), above, in any underlying subcontract except a subcontract for standard commercial supplies or raw materials; and (c) to post and to cause subcontractors to post in conspicuous places available to employees and applicants for employment, notices setting forth the substance of this clause.

6. CONTINGENT FEE PROHIBITION: The Contractor warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, to solicit or secure this agreement, and that it has not paid or agreed to pay any
7. NONAVAILABILITY OF FUNDING: If the General Assembly fails to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be canceled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either the State's rights or the Contractor's rights under any termination clause in this Contract. The effect of termination of the Contract here-under will be to discharge both the Contractor and the State of Maryland from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of any nonrecurring costs incurred but not amortized in the price of the Contract. The State shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

8. TERMINATION FOR CAUSE: If the Contractor fails to fulfill its obligations under this Contract properly and on time, or otherwise violates any provision of the Contract, the State may terminate the Contract by written notice to the Contractor. The notice shall specify the acts or omissions relied upon as cause for termination. All finished or unfinished work provided by the Contractor shall, at the State's option, become the State's property. The State of Maryland shall pay the Contractor fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the amount of damages caused by the Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor will remain liable after termination and the State can affirmatively collect damages. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B.

9. TERMINATION FOR CONVENIENCE: The performance of work under this Contract may be terminated by the State in accordance with this clause in whole, or from time to time in part, whenever the State shall determine that such termination is in the best interest of the State. The State will pay all reasonable costs associated with this Contract that the
Contractor has incurred up to the date of termination, and all reasonable costs associated with termination of the Contract; provided, however, the Contractor shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.12(A) (2).

10. **DELAYS AND EXTENSIONS OF TIME:** The Contractor agrees to perform this agreement continuously and diligently. No charges or claims for damages shall be made by the Contractor for any delays or hindrances, regardless of cause, in the performance of services under this Contract. Time extensions may be granted only for excusable delays that arise from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to acts of God, acts of the public enemy, acts of the State in either its sovereign or contractual capacity, acts of another contractor in the performance of a State contract, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or the delay of a subcontractor or supplier arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or the subcontractor or supplier.

11. **VARIATIONS IN ESTIMATED QUANTITIES:** No equitable adjustment shall be permitted in favor of either the State of Maryland or the Contractor in the event that the quantity of any pay item in this Contract is an estimated quantity and the actual quantity of such pay item varies from the estimated quantity stated in the Contract.

12. **SUSPENSION OF WORK:** The State unilaterally may order the Contractor in writing to suspend, delay, or interrupt all or any part of its performance for such period of time as the Procurement Officer may determine to be appropriate for the convenience of the State.

13. **PRE-EXISTING REGULATIONS:** In accordance with the provisions of Section 11-206 of the State Finance and Procurement Article, Annotated Code of Maryland, as from time to time amended, the regulations set forth in Title 21 of the Code of Maryland Regulations (COMAR 21) in effect on the date of execution of this Contract are applicable to this Contract.

14. **FINANCIAL DISCLOSURE:** The Contractor shall comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, as from time to time amended, which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate $100,000 or more, shall within 30 days of the time when the aggregate
value of these contracts, leases or other agreements reaches $100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

15. POLITICAL CONTRIBUTION DISCLOSURE: The Contractor shall comply with the provisions of Article 33, Sections 30-1 through 30-4 of the Annotate Code of Maryland, as from time to time amended, which require that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies, or a political subdivision of the State, during a calendar year under which the person receives in the aggregate $10,000 or more, shall, on or before February 1 of the following year, file with the Secretary of State of Maryland certain specified information to include disclosure of political contributions in excess of $100 to a candidate for elective office in any primary or general election.

16. RETENTION OF RECORDS: The Contractor shall retain and maintain all records and documents relating to this Contract for three years after final payment by the State of Maryland hereunder or any applicable statute of limitations, whichever is longer, and shall make them available for inspection and audit by authorized representatives of the State, including the Procurement Officer or the Procurement Officer's designee, at all reasonable times.

17. COMPLIANCE WITH LAWS: The Contractor hereby represents and warrants that:

A. It is qualified to do business in the State of Maryland and that it will take such action as, from time to time, may be necessary to remain so qualified;

B. It is not in arrears with respect to the payment of any monies due and owing the State of Maryland, or any department or unit thereof, including but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;

C. It shall comply with all federal, State and local laws applicable to its activities and obligations under this Contract; and,

D. It shall obtain, at its expense, all licenses, permits, insurance, and governmental approvals, if any, necessary to the performance of its obligations under this Contract.

18. COST AND PRICE CERTIFICATION: By submitting cost or price information, the Contractor certifies to the best of its
knowledge that the information submitted is accurate, complete, and current as of the date of its bid or offer.

The price under this contract and any change order or modification hereunder, including profit or fee, shall be adjusted to exclude any significant price increases occurring because the contractor furnished cost or price information which, as of the date of its bid or offer, was inaccurate, incomplete, or not current.

19. **SUBCONTRACTING; ASSIGNMENT:** The contractor may not subcontract any portion of the services provided under this contract without obtaining the prior written approval of the State of Maryland, nor may the contractor assign this contract or any of its rights or obligations hereunder, without the prior written approval of the State. Any such subcontract or assignment shall be subject to any terms and conditions that the State deems necessary to protect its interests. The State shall not be responsible for the fulfillment of the contractor's obligations to the subcontractors.

20. **CHANGES IN SCOPE:** The State shall retain the unilateral right to require changes in the scope of services provided under the contract so long as such changes are within the general scope of work to be performed under the contract.

21. **PAYMENT OF STATE OBLIGATIONS:** Payments to the contractor pursuant to the contract shall be made no later than 30 days after the State's receipt of a proper invoice from the contractor. Each such invoice must reflect the contractor's federal tax identification number. Charges for late payment of invoices other than as prescribed by Title 15, Subtitle 1 of the State Finance and Procurement Article, Annotated Code of Maryland, as from time to time amended, are prohibited.

22. **CONFLICTING TERMS:** The contractor understands and agrees that the terms and conditions of this exhibit are mandatory under state law, may not be waived, and that they supersede any conflicting terms and conditions set forth in the contract, which shall be deemed to be amended to incorporate therein the provisions set forth in this exhibit.

MANDK (Rev. 5/31/91)
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STATE OF MARYLAND
UNIVERSITY OF MARYLAND BALTIMORE COUNTY
GENERAL CONDITIONS OF THE CONTRACT BETWEEN
THE UNIVERSITY AND THE CONTRACTOR

1.0 DEFINITIONS & RESPONSIBILITIES

1.1 DEFINITIONS

A. Approved Equal - Those supplies or services, or compatible items of construction whose quality, design or performance characteristics are functionally equal or superior to an item specified.

B. The Architect - A person registered in the State of Maryland to practice architecture and commissioned by the State to prepare the contract documents for the designated project. Whenever the contract documents are prepared by a registered engineer in independent practice, and no architect is employed, all reference to the architect shall be construed to refer to the engineer.

C. Change Order - A written order signed by the responsible Procurement Officer, directing a Contractor to make changes which the changes clause of a contract authorizes the Procurement Officer to order with or without the consent of the Contractor.

D. Contract - The written agreement executed between the University and the successful bidder, covering the performance of the work and furnishing of labor, services, equipment and materials, by which the Contractor is bound to perform the work and furnish the labor, services, equipment and materials, and by which the University is obligated to compensate him therefor at the mutually established and accepted rate or price. The contract shall include the construction bid form, contract forms and bonds, general conditions, specifications, addenda, supplemental specifications, all special provisions, all technical provisions, all plans and notice to proceed, also any written change orders and supplemental agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof. (Said documents are sometimes referred to as the "contract documents").

E. The Contractor - The person or organization having direct contractual relation with the University for the execution of the "Work". If the Contractor hereunder is

00700-1
comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

F. Contract Time and Completion Date - The number of working or calendar days shown in the construction bid form indicating the time allowed for the completion of the work contemplated in the contract. In case a calendar date of completion is shown in the construction bid form, in lieu of the number of working or calendar days, such work shall be completed on or before that date.

G. Critical Path Method (CPM) - A scheduling/management tool showing a network of work elements or activities for a construction project.

H. Day - means calendar day unless otherwise designated.

I. Notice to Proceed - A written notice to the Contractor of the date on or before which he shall begin the prosecution of the work to be done under the contract.

J. Payment Bond - The security in the form approved by the University and executed by the Contractor and his surety, and paid for by the Contractor as a guarantee that the contractor will pay in full all his bills and accounts for materials and labor used in the construction of the work, as provided by law.

K. Performance Bond - The security in the form approved by the University and executed by the Contractor and his surety, and paid for by the Contractor, guaranteeing complete performance of the contract.

L. Plans - The official drawings issued by the University as part of the contract documents, including those incorporated in the contract documents by reference.

M. Procurement Officer - The person authorized by the University in accordance with law or regulations to formulate, enter into or administer contracts or make determinations or findings with respect into them. The procurement officer for this contract is identified under "Issuing Office". The Procurement Officer may designate a University Representative to this project. He will be identified at the job initiation conference.

N. Repair - Where used in these contract document, repair shall be taken to mean to restore after injury, deterioration, or wear; to mend, to renovate by such means as appropriate and to supply such materials and
labor as necessary to render the item to be repaired sound, solid, true, plumb, square, even, smooth and fully serviceable. Upon completion of such repair it must be, unless otherwise stated, rendered to such conditions as to present a first class finished work, or in instances where the repaired item serves as a base for additional finish, the repaired work must be such as to permit a first-class finish, to be applied without extra cost to the University. When the work "repair" is used in connection with machinery or mechanical equipment it shall mean, in addition to the above, rendering the equipment completely serviceable and efficient ready for normal use for which it was intended originally.

O. The State - Refers to the State of Maryland as an entity of which the University is a Department. The State acts only through its Board of Public Works. No action or representation is binding upon the State of Maryland unless it is made by, or ratified by, the Board of Public Works.

P. Subcontractor - as employed herein includes only those having a direct contract with the Contractor. It includes one who furnishes material worked to a special design according to the plans and specifications for the "Work", it excludes one who merely finishes material not so worked.

Q. Supplemental Agreement - A written agreement covering added or changed work which is beyond the scope of the contract and the changes clause. A supplemental agreement becomes a part of the contract when approved and properly executed by all parties to the contract.

R. Surety - The corporate body bound with and for the Contractor, for the full and complete performance of the Contract, and for the payment of all debts pertaining to the work.

S. "University" or "University of Maryland" or "Owner" - refers to the University of Maryland, an agency and instrumentality of the State of Maryland. In particular, the "University" refers to the UMBC campus of the University or its authorized representative that issues bid information relative to a particular transaction. If an architect has prepared contract documents some references to the University may be construed to be the architect. The University will define all such cases where it assigns its responsibility to the architect.
T. Work - Work shall be understood to mean the furnishing of all labor, materials, equipment, services, utilities and other incidentals necessary to the successful completion of the project and the carrying out of all the duties and obligations imposed upon the Contractor by the contract.

U. Written Notice - shall be deemed to have been duly served if delivered in person to the individual or to the member of the firm or to an office of the corporation to whom it is intended, or if delivered to or sent by registered mail, to the last business address known to him who gives notice.

1.2 UNIVERSITY'S RESPONSIBILITIES

1.2.1 The University shall furnish all surveys describing the physical characteristics, legal limitations and utility location for the site of the project, and a legal description of the site.

1.2.2 Information or services under the University's control shall be furnished by the University with reasonable promptness to avoid delay in the orderly progress of the Work,

1.2.3 The University shall forward all instructions to the Contractor through the University representative. Verbal instructions will be confirmed in writing.

1.2.4 The foregoing are in addition to other duties and responsibilities of the University enumerated herein and especially those in respect to Work by University or by separate Contractors, payments and completion, and insurance.

1.3 CONTRACTOR'S RESPONSIBILITIES

1.3.1 The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the contract.

1.3.2 The Contractor shall be responsible to the University for the acts and omissions of his employees, subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.
1.3.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the contract documents either by the activities or duties of the architect in his administration of the contract, or by inspections, tests or approvals required or performed by persons other than the Contractor.

1.3.4 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the contract documents and shall not unreasonably encumber the site with any materials or equipment.

1.3.5 Cutting And Patching of Work:

(1) 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.

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

1.3.6 The Contractor shall forward all communications to the University Representative, through the architect.

1.3.7 The Contractor shall perform all work in accordance with the lines, grades, typical cross sections, dimensions, and other data required by the contract documents or as modified by written orders, including the furnishing of all materials, services, implements, machinery, equipment, tools, supplies, transportation, labor, and all other items necessary for the satisfactory prosecution and completion of the project in full compliance with the requirements of the contract documents.

1.3.8 Indemnification

(1) To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the University and its employees from and against all claims, damages, losses and expense including but not limited to attorney's fees, arising out of or resulting from the performance of the
Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

(2) In any and all claims against the University or its employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor, or any subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

(3) The obligations of the Contractors under this paragraph shall not extend to the liability of the Architect, his agents or employees arising out of (i) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (ii) the giving of or the failure to give directions or instructions by the architect, his agents or employees providing such giving or failure to give is the primary cause of the injury or damage.

2.0 CONTRACT DOCUMENTS, SHOP DRAWINGS, PRE-QUALIFICATIONS

2.1 CONTRACT DOCUMENTS

2.1.1 The contract documents are complementary. That which is called for any one shall be as binding as if called for by all.

(1) Intent of the documents is to include all Work necessary for proper completion of the project ready for continual efficient operation. It is not intended, however, to include any Work not properly inferable.

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(2) Clarification: The Contractor should obtain clarification to all questions which may have arisen as to intent of the contract documents, or any actual conflict between two or more items in the contract documents. Should the Contractor have failed to obtain such clarification, then the University Representative may direct that the Work proceed by any method indicated, specified or required by the contract documents in the interest of maintaining the best construction practice. Such direction by the University Representative shall not constitute the basis for a claim for extra costs by the Contractor. The Contractor acknowledges that he had the opportunity to request clarification prior to submitting his bid to the University and therefore agrees that he is not entitled to claim extra costs as a result of such clarification.

(3) Jargon: Work described in words that have a well-known technical or trade meaning shall be held to refer to such recognized standard use.

(4) Identification: The contract documents shall be signed in duplicate by the University and the Contractor.

2.1.2 Drawings: The Contractor shall do no Work without proper drawings and/or instructions. Drawings are in general drawn to scale, and symbols are used to indicate materials and structural and mechanical requirements. When symbols are used those parts of the drawings are of necessity diagrammatic and it is not possible to indicate all connections, fittings, fastenings, etc. which are required to be furnished for the proper execution of the Work. Diagrammatic indications of piping, duct work and conduit and similar items in the work are subject to field adjustment in order to obtain proper grading, fitting passage over, under or past obstructions, to avoid exposure in finished rooms and unsightly and obstructing conditions. The Contractor shall make these adjustments, at no increased cost to the University.

(1) Copies Furnished: The University will furnish the Contractor without cost, no more than ten (10) copies of drawings and specifications (except those required for bidding purposes) and six copies of each large scale detail or supplemental drawing prepared by the University Representative. Additional copies may be obtained by the Contractor upon payment of the cost of reproduction of the drawings.
(2) Copies At the Site: The Contractor shall keep in the job site office a complete set of all drawings, specifications, shop drawings, schedules, etc, in good order and available to the University Representative.

(3) Ownership: All documents remain the property of the University. They must not be used on other work and they shall be returned to the University upon completion of the Work.

2.1.3 Large Scale Detail Drawings: The University Representative shall furnish, when additional instructions, in the form of large scale developments of the drawings used for bidding, or to amplify the specifications for the proper execution of the Work. These shall be true developments of the bidding documents and reasonably inferable therefrom. The Work shall be executed in conformity therewith.

2.1.4 Dimensions: The Contractor shall carefully check all dimensions prior to execution of the particular Work. Whenever inaccuracies or discrepancies are found, the Contractor shall consult the University Representative prior to any construction or demolition. Should any dimensions be missing, the University Representative will be consulted and supply them prior to execution of the Work. Dimensions for items to be fitted into constructed conditions at the job will be taken and will be the responsibility of the Contractor. The obvious intent of the documents or obvious requirement dictated by conditions existing or being constructed supersedes dimensions or notes which maybe conflict therewith. Whenever a stock size manufactured item or piece of equipment is specified by its normal size, it is the responsibility of the Contractor to determine the actual space requirements for setting or entrance to the setting space. No extra will be allowed by reason of Work requiring adjustments in order to accommodate the particular item of equipment.

2.1.5 Whenever new work, building, addition or portions thereof is not accurately located by plan dimensions, the University Representative will supply exact position prior to execution of the Work.

2.2 SHOP DRAWINGS

2.2.1 The Contractor shall submit, for the University's approval, at such time as agreed in the Contractor's schedule, shop drawings, including setting drawings and schedules as required by the University for the Work of

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the various trades. These drawings shall be prepared in conformity with the best practice and standards for the trade concerned. Due regard shall be given to speed and economy of fabrication and erection.

2.2.2 All shop drawings must show the name of the project and the University contract number.

2.2.3 Size of Drawings: All shop drawings and details submitted to the University Representative for approval shall be printed on sheets of the same size as the contract drawings prepared by the University. When a standard of a fabricator is of such size to print more that one drawing on a sheet of the size of the construction drawings, this is acceptable. Sheets larger than the construction drawings will not be accepted except when specifically permitted by the University. Shop detail supplied on a sheet of letter size 8-1/2" x 11" is acceptable for schedules and small details.

2.2.4 Items for which shop drawings will be required: Shop drawings shall be required for all items which are specifically fabricated for the Work or when the assembly of several items is required for a working unit. Shop drawings are required for all reinforcing and structural steel, specially made or cut masonry units, miscellaneous metal work, specially made millwork, plaster moulds, or mouldings, marble and slate, special rough hardware and all heating, ventilating, plumbing and electrical items requiring special fabrication or detailed connections including refrigeration, elevators, dumb waiters, laboratory equipment, ducts, etc.

2.2.5 Copies Required: Contractor shall supply two copies for the University, in addition to such copies as the Contractor may desire to be returned for his own use.

2.2.6 Examination and Approval: The University will examine and return shop drawings with reasonable promptness, noting desired corrections, or accepting or rejecting them.

2.2.7 Field Dimensions and Conditions: The University is not responsible for the check of dimensions or existing conditions in the field. This is the sole responsibility of the Contractor.

2.2.8 Resubmission: When the University Representative notes desired corrections, or rejects the drawings, the
Contractor shall resubmit the drawings with corrective changes.

2.2.9 Contractor's Responsibility: Unless the Contractor has, in writing, notified the University to the contrary, at the time of the submission, that the drawings are in conformity with the contract documents and do not involve any change in the contract price or any change which will alter the space within the structure or alter, the nature of the building from that contemplated by the contract documents.

2.2.10 University's Notations: Should the Contractor consider any rejection or University's notation on the shop drawings to cause an increase in the cost of the Work from that required by the contract documents, then the Contractor shall desist from further action relative to the item he questions and shall notify the University, in writing, within five days of the additional or less cost involved. No work shall be executed until the entire matter is clarified and the Contractor is ordered by the University to proceed. Failure of the Contractor to serve written notice as above required shall constitute a waiver of any claim in relation thereto. Similarly, should the University's notation or change involve less Work than is covered by the contract documents, the Contractor shall allow the University an equitable credit resulting from the change in the work.

2.3 PRE-QUALIFICATIONS

2.3.1 The contractor to whom this contract is awarded must have a minimum of five (5) years full time experience in the application and installation of the work to be performed.

2.3.2 The contractor shall posses a working knowledge of the construction trades and have skilled workmen to produce a neat, satisfactory, workmanlike installation to the satisfaction of the University of Maryland Baltimore County Campus, Construction Engineering Department.

2.3.3 Upon request, prior to the contract award the contractor shall submit to the University a list of five (5) previous jobs or projects performed by the Contractor's Company or Organization.

List shall contain the following:

1. Name of company work was performed for.
2. Amount of the contract.
3. Name of the contract or title.
4. Name and telephone number of the individual issuing job specification.

2.3.4 Use of Sub-contractors:

If subcontractors are to be utilized, a subcontractor listing form must be attached to the bid form at the time of the bid, stating the subcontractor's company name and telephone number. Any bids received without this Subcontractor Listing Form designates that the contractor possesses all working knowledge and personnel to perform and complete this project entirely with his own forces.

2.3.5 In the event that subcontractors are necessary to perform work for this project; they must also meet all the pre-qualifications stated above in section 2.3.1, 2.3.2, and 2.3.3.

3.0 SCOPE OF THE WORK

3.1 INTENT OF THE CONTRACT DOCUMENTS

3.1.1 It is the intent of the contract documents to show all of the work necessary to complete the project.

3.2 GENERAL CONDITIONS CONTROLLING

3.2.1 In event of a conflict between these General Conditions and any other provision of the contract documents, these General Conditions shall prevail unless such other provision expressly provides to the contrary.

3.3 DIFFERING SITE CONDITIONS

3.3.1 The Contractor shall promptly, and before such conditions are disturbed, notify the procurement officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract. The procurement officer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable

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adjustment shall be made and the contract shall be modified in writing accordingly.

3.3.2 No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in 3.3.1 above, provided, however, the time prescribed therefor may be extended by the University.

3.3.3 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

3.4 SITE INVESTIGATION

3.4.1 The Contractor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work.

3.4.2 The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials, which shall include the presence of lead or other substances classified by EPA as hazardous materials or controlled substances and the requirements for their removal and disposal, or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site. Including all exploratory work done by the University, as well as from information presented by the drawings and specifications made a part of this contract. Any failure by the Contractor to acquaint himself with the available information may not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The University assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the University.

3.5 CONDITIONS AFFECTING THE WORK

3.5.1 The Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work and the general and local conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve him
from responsibility for successfully performing the work without additional expense to the University. The Contractor agrees not to place any credence in any understanding or representation concerning conditions made by any University employee or agents prior to the execution of this contract, unless such understanding or representation are expressly stated in the contract.

3.6 CHANGES IN THE WORK

3.6.1 The Procurement Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make any change in the work within the general scope of the contract, including but not limited to changes:

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the state-furnished facilities, equipment, materials, services or site; or directing acceleration in the performance of the work.

3.6.2 Any other written order or an oral order (which terms as used in this paragraph shall include direction, instruction, interpretation or determination from the procurement officer) which causes any such change, shall be treated as a change order under this clause, provided that the Contractor gives the Procurement Officer, written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a change order.

3.6.3 Except as herein provided, no order, statement, or conduct of the Procurement Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

3.6.4 If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly: Provided, however, that except for claims based on defective specifications, no claim for any change under (2) above shall be allowed for any costs incurred more than 20 days before the Contractor gives written notice as therein required: And provided further, that in the case of defective specifications for which the University
is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specification.

3.6.5 If the Contractor intends to assert a claim for an equitable adjustment under this clause, he shall, within 30 days after receipt of a written change order under 3.6.1 above or the furnishing of written notice under 3.6.2 above submit to the Procurement Officer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the University. The statement of claim hereunder may be included in the notice under 3.6.2 above.

3.6.6 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

3.7 MODIFICATION OF CONTRACT PRICE

3.7.1 When changes in the work require modification of the Contract Price, such modification shall be accomplished as follows:

3.7.2 The Contractor shall promptly submit to the University Representative a fully itemized breakdown of the quantities and price used in computing the value of the requested change along with a detailed explanation and justification for the proposed change regardless of the nature of the change.

3.7.3 For all changes in the Work to be performed by a subcontractor, the Contractor shall furnish the subcontractor's fully itemized breakdown of quantities and prices which shall bear the original signature of a representative of the subcontractor authorized to act for the subcontractor. If requested by the University, proposals from suppliers or other supporting data required to substantiate costs shall be furnished.

3.7.4 Modification of the Contractor Price, when required, shall be determined as follows:

(1) When unit prices are stated in the Contract or have been subsequently agreed upon, by application of such unit prices.

(2) A lump sum price agreed upon by both the University and Contractor.

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(3) If job conditions, or the extent of a nature of the change, or if the University and the Contractor fail to agree upon a lump sum price or the application of unit prices to determine the cost of any proposed change, the Work shall be done on the basis of a Force Account as hereinafter stated under Section 8.2 FORCE ACCOUNT WORK. Under these conditions, the University shall have the right to issue an order for the Work to be performed and the Contractor shall proceed as directed under the provisions of Section 8.2.

(4) If the change involves only a credit, the Contract Price will be reduced by the amount it would have cost the Contractor if the work omitted had not been eliminated; including overhead and profit, however, the Contractor and the subcontractor will be allowed to retain a sum not in excess of three percent (3%) for handling.

(5) If the change involves both a credit and a debit, both sums shall be shown and the two sums balanced to determine the adjusted total cost or credit. No allowance to the Contractor shall be made or allowed for loss of anticipated profits on account of any changes in the Work.

(6) Unless otherwise specified, the allowable mark-up for combined overhead and profit for work performed by the Contractor with his own forces will be based upon the monetary value of the Work in accordance with the following schedule:

<table>
<thead>
<tr>
<th>COST OF CONTRACT MODIFICATION</th>
<th>COMBINED OVERHEAD AND PROFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $1,000</td>
<td>25%</td>
</tr>
<tr>
<td>$1,001 - $5,000</td>
<td>20%</td>
</tr>
<tr>
<td>$5,001 - $10,000</td>
<td>17%</td>
</tr>
<tr>
<td>$10,001 - $25,000</td>
<td>15%</td>
</tr>
<tr>
<td>Over $25,000</td>
<td>Negotiated but not more than 15%</td>
</tr>
</tbody>
</table>

(7) For work performed by a subcontractor with his own forces, the percentages for combined overhead and profit for a subcontractor will be as stated in paragraph (6) above. On work partly or solely performed by a subcontractor, the Contractor will be allowed eight percent (8%) of the total cost of the subcontractor's labor, materials overhead and profit, including taxes and insurance on labor required by statute.
(8) On all changes in the Work defined in Section 3.6, no Contractor, or subcontractor will be allowed any expenses, overhead or profit for employment of another Contractor to perform Work for him.

(9) On all changes in the Work, the Contractor will be reimbursed for his expenditures for Workmen's Compensation Insurance, Social Security, Taxes and Unemployment Compensation Taxes covering persons actually engaged upon the Work and the actual increased cost of bonds.

(10) The cost of foremen and superintendents may be added only when the Change Order makes necessary the hiring of additional supervisory personnel or makes their employment for time additional to that required by the basic contract.

(11) The Contractor shall be allowed the actual cost for rental of machine power tools or special equipment, including fuel and lubricants which are necessary to execute the Work required on the change, but no percentages shall be added to this cost. The rental rate is to be agreed upon by the University and the Contractor; the rate shall relate generally to the latest as filed by the Associated Equipment Distributors.

(12) If the Contractor and the University cannot agree as to the extent the Contract time shall be increased for extra Work or the extent the Contract time shall be reduced for Work omitted by the University, the increase or decrease, as the case may be, shall be in the same proportion of the original contract as the cost of additional Work; including overhead and profit for the amount of the omitted Work; including overhead, would have cost as aforesaid bears to the total contract price.

(13) No order for change at any time or place shall in any manner or to any extent relieve the Contractor of any of his obligations under the contract.

(14) The University, shall have authority to make minor changes in the Work not involving extra cost, and not inconsistent with the purposes of the building. Otherwise, except in any emergency endangering life or property, no extra Work or changes to the Work shall be done unless authorized by, the University prior to any such Work or changes to the Work being done.

3.7.4 The allowable percentages of cost for overhead and profit are deemed to include, but not be limited to,
the following:

(1) Job supervision and field office expense required by the Contract, expenses for timekeepers, clerks and watchmen, cost of correspondence of any kind, and insurance not specifically mentioned herein, all expenses in connection the maintenance and operation of the field office, use of small tools, and cost of small trucks generally used for transporting either workmen, materials, tools or equipment to job location, and incidental job burdens. No percentage allowances will be made for maintenance or operation of Contractor's regularly established principal office, branch office or similar facilities.

3.8 UNAUTHORIZED WORK

3.8.1 The Contractor shall not be paid for any work not authorized in writing by the University.

4.0 CONTROL OF THE WORK

4.1 AUTHORITY OF THE UNIVERSITY REPRESENTATIVE

4.1.1 The University Representative shall be the initial interpreter of the contract documents. He will furnish with reasonable promptness such clarifications as he may deem necessary for the proper execution of the Work; such clarifications to be consistent with the intent of the contract documents and when in special instances he is authorized by the University so to act, he has authority to stop Work whenever such stoppage may be necessary to insure the proper execution of the contract.

4.2 CONFORMITY WITH CONTRACT REQUIREMENTS

4.2.1 All work performed and all materials furnished shall be in conformity with the contract requirements.

4.2.2 In the event the University Representative finds the materials or the finished product which the materials are used or the work performed are not in complete conformity with the contract requirements and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

4.2.3 In the event the University Representative finds the materials or the finished product in which the materials are used are not in complete conformity with the contract requirements, but have resulted in a satisfactory
product, he shall then make a determination if the work shall be accepted. In this event, the University will document the basis of acceptance by a Change Order which will provide for an appropriate adjustment in the contract price.

4.3 ADJACENT WORK

4.3.1 The University shall have the right, at any time, to contract for and/or perform work on, near, over or under the work covered by this contract. In addition, other work may be performed under the jurisdiction of another State agency. The Contractor shall cooperate fully with such other Contractors and carefully fit his own work to such other work as may be directed by the University Representative.

4.3.2 The Contractor agrees that in event of dispute as to cooperation or coordination with adjacent Contractors the University will act as referee and decisions made by the University will be binding. The Contractor agrees to make no claims against the University for any inconvenience, delay or loss experienced because of the presence and operations of other Contractors.

4.4 CONTRACTOR / UNIVERSITY COOPERATION

4.4.1 Before any of the work shall begin, the contractor shall confer with the University Representative at the site and agree on sequence of procedure, means of access to the premises, space for storage of materials and equipment, use of approaches, use of facilities, etc.

4.4.2 Generally all work shall be performed between the hours of 7:30 a.m. and 4:00 p.m., Monday through Friday, inclusive. If it becomes necessary to perform work on days or at times other than those indicated above or on holidays, special permission must be obtained in advance from the university's Representative.

4.5 CONTROL BY THE CONTRACTOR

4.5.1 The Contractor shall constantly maintain efficient supervision of the Work, using his best skill and coordinating. He shall carefully study and compare all drawings, specifications and other instructions and check them against conditions existing or being constructed on the project. He shall at once report to the University Representative any error, inconsistency or omission which he may discover.

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4.6 COOPERATION WITH UTILITIES

4.6.1 It is understood and agreed that the Contractor has considered in his bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for normal delays, inconvenience, or damage sustained by him due to any interference from the said utility appurtenances, the operation of moving them, or the making of new connections thereto if required by the contract documents.

4.6.2 The Contractor shall have responsibility for notifying all affected utility companies prior to performing any work on their utilities and cooperate with them in achieving the desired results. All damage to utility facilities caused by the Contractor's operations shall be the responsibility of the Contractor.

4.6.3 At points where the Contractor's operations are adjacent to properties of railway, telegraph, telephone, water and power companies, or are adjacent to other property, damage to which might result in expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made by the Contractor.

4.6.4 The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work may be reduced to a minimum and that services rendered by those parties will not be unnecessarily interrupted.

4.6.5 In the event of interruption to utility services is a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

4.7 AUTHORITY AND DUTIES OF UNIVERSITY INSPECTORS

4.7.1 University inspectors shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The inspector is not
authorized to revoke, any requirements. He is authorized to call the attention of the Contractor to any failure of the work or materials to conform to the contract. He is authorized to reject materials or suspend the work until any questions at issue can be referred to and decided by the University. Inspectors shall perform their duties at such times and in such manner as will not unnecessarily impede progress on the contract.

4.7.2 The inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the management of the work by the latter.

4.7.3 Any advice which the inspector may give the Contractor shall not be construed as binding the University in any way, or releasing the Contractor from fulfilling all of the terms of the contract. The duty of the inspector on the project is to observe the progress of the work and to report any deviations from the requirements of the contract documents; however, should the inspector fail to report any such deviation from the contract requirements, this does not release the Contractor from fulfilling all of the terms of the contract.

4.7.4 Where there is disagreement between the Contractor and the inspector, the inspector will immediately direct the University's attention to the issues of disagreement, and if the Contractor still refuses to make corrections, comply or suspend work, the University will prepare and deliver in writing to the Contractor, by mail or otherwise, a written order suspending the work and explaining the reason for such shutdown. As soon as the inspector is advised of the delivery of the shutdown order, the inspector shall immediately leave the site of the work and any work performed during the inspector's absence will not be accepted or paid for any may be required to be removed and disposed of at the Contractor's expense.

4.8 INSPECTION OF THE WORK

4.8.1 All Work, including the fabrication and source of supply, is subject to observation by the University Representative and those agencies required by law to inspect specific items.

4.8.2 The Contractor shall provide facilities for access and inspection as required by the University.
4.8.3 If the specifications, the University's instructions, laws, ordinances or any public authority require any Work to be specially tested or approved, the Contractor shall give the University timely notice of its readiness for inspection, and if the inspection is by another authority, the date fixed for such inspection. Inspections by the University shall be made promptly and where practicable at the source of supply. Any Work covered without approval of the University Representative must, if required by the University, be uncovered for examination at the Contractor's expense.

4.8.4 If the contract requires electrical work, a certificate of electrical inspection from an independent (non-govermental) electrical inspection agency approved by the State of Maryland Fire Marshall shall be submitted to the University prior to or with the final payment invoice. The contractor shall make application for the inspection, coordinate same, and pay the required inspection fee.

4.9 REMOVAL OF DEFECTIVE WORK

4.9.1 All work and materials which do not conform to the requirements of the contract will be considered unacceptable.

4.9.2 Any unacceptable or defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause, found to exist shall be removed and replaced by work and materials which shall conform to the contract requirements or shall be remedied otherwise in an acceptable manner authorized by the University Represenative.

4.9.3 Upon failure on the part of the Contractor to comply promptly with any order of the University Represenative, made under the provisions of this section, the University Represenative shall have authority to cause defective or unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to cause the costs to be deducted from any monies due or to become due the Contractor under this contract.

4.10 MAINTENANCE OF WORK DURING CONSTRUCTION

4.10.1 The Contractor shall maintain the work during construction and until acceptance. This maintenance shall be continuous and effective, prosecuted with adequate equipment and forces to the end that all parts of the work be kept in satisfactory condition at all
times and protected from damage of any kind from external sources.

4.10.2 Particular attention shall be given to drainage, both permanent and temporary. The Contractor shall use all reasonable precautionary measures to avoid damage or loss that might result from accumulations and concentrations of drainage water, and material carried by such waters and such drainage shall be diverted or dispensed when necessary to prevent damage to excavation, embankments, surfaces, structures or property. Suitable measures shall be taken by the Contractor to prevent the erosion of soil in all construction areas where the existing ground cover has been removed. Such measures shall be in compliance with the requirements of any governmental entity having jurisdiction.

4.10.3 All cost of maintenance work during construction and before final acceptance shall be included in the base bid and the Contractor will not be paid any additional amount for such work.

4.10.4 In the event that the Contractor's work is halted by the University for failure to comply with the provisions of the contract, the Contractor shall maintain the entire project as provided herein, and provide such ingress and egress for local residents or tenants adjacent to the project site, for tenants of the project site, and for the general public as may be necessary during the period of suspended work or until the Contractor has been declared in default.

4.10.5 On projects where traffic flow is maintained, the Contractor shall be responsible for repair and restoration of all traffic damages to the work, either partially or totally completed, until such time as the work is accepted by the University.

4.11 FAILURE TO MAINTAIN ENTIRE PROJECT

4.11.1 Failure on the part of the Contractor, at any time, to comply with the provisions of Section 4.10 shall result in the University notifying the Contractor to comply with the required maintenance provisions. In the event that the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the University will immediately proceed with adequate forces and equipment, to maintain the project, and the entire cost of this maintenance will be deducted from monies due the Contractor.
4.12 UNIVERSITY'S RIGHT TO DO WORK

4.12.1 If the Contractor should neglect to prosecute the Work properly or fail to perform any provision of this contract, the University may after three days' written notice to the Contractor make good such deficiencies and may deduct the cost thereof from the monies then or thereafter due the Contractor.

5.0 MATERIALS

5.1 GENERAL

5.1.1 All materials shall meet all quality requirements of the contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the University Representative in writing of the sources from which he proposes to obtain all materials requiring approval, testing, inspection, or certification prior to incorporation into the work as soon as possible after receipt of notification award of the contract.

5.1.2 Materials include all manufactured products and processed and unprocessed natural substances required for completion of the contract. The Contractor, in accepting the contract, is assumed to be thoroughly familiar with the materials required and their limitation as to use, and requirements for connection, setting, maintenance and operation. Whenever an article, material, or equipment is specified and a fastening, furring, connection (including utility connections), access hole, flashing closure piece, bed or accessory is normally considered essential to its installation in good quality construction, such shall be included as if fully specified. Nothing in these specifications shall be interpreted as authorizing any Work in any manner contrary to applicable laws, codes or regulations.

5.1.3 Approval. All materials are subject to the University's approval as to conformity with the specifications, quality, design, color, etc. No work for which approval is necessary shall be used until written approval is given by the University Representative. Approval of a subcontractor or supplier as such does not constitute approval of a material which is other than that included in the specifications.

5.1.4 New Materials. Unless otherwise specified, all materials shall be new. Old materials must not be used
as substitutes for new, regardless of condition or repair, unless approved in writing by the University Representative.

5.1.5 Quality. Unless otherwise specified, all materials shall be of the best quality of the respective kinds.

5.1.6 Samples. The Contractor shall furnish for approval all samples as directed. The materials used shall be the same as the approved samples.

5.1.7 Proof of Quality. The Contractor shall, if requested, furnish satisfactory evidence as to the kind and quality of materials either before or after installation. He shall pay for any tests or inspections called for in the specifications and such tests as may be deemed necessary for "substitutions," as set forth in Section 5.3 of these General Conditions.

5.1.8 Standard Specifications. When no specification is cited and the quality, processing, composition or method of installation or a thing is only generally referred to, then:

(1) For items not otherwise specified below, the latest edition of the applicable American Society for Testing Materials specification is the applicable specification.

(2) For items generally considered as plumbing and those items requiring plumbing connections, the applicable portions of the latest edition of the B.O.C.A. Code are the applicable specification.

(3) For items generally considered as heating, refrigerating, air-conditioning or ventilating, the applicable portions of the latest edition of the A.S.H.R.A.E. Handbook published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. are the applicable specification.

(4) For items generally considered as site work, the applicable portions of the Maryland S.H.A. Standard Specifications is the applicable specification.

(5) For items generally considered as electrical, the applicable provisions of the latest edition of the National Electric code are the applicable specification.

(6) For items generally considered as fire protection, the applicable portion of the latest edition of the National
Fire Protection Association Code is the applicable Specification.

5.2 STORAGE AND HANDLING OF MATERIALS

5.2.1 Materials shall be so stored as to assure the preservation of their quality and acceptability for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. Approved portions of the project site may be used for storage purposes and for the placing of the Contractor's plant and equipment; such storage areas must be restored to their original condition by the Contractor at his expense.

(1) All mechanical and/or electrical equipment delivered to the job site shall be stored on pedestals, above ground and under roof or other approved covering. All enclosures for equipment shall be weatherproof. Any motors, which are not totally enclosed, and dry type transformers that are involved in the work, shall be stored in a heated area with a minimum temperature of fifty degrees Fahrenheit (50 F). All valves shall be stored under roof on wood pedestals, above ground. All insulation shall be stored under roof or in trailers, adequately protected from the weather. The Contractor shall follow all written instructions and recommendations of the manufacturer and all requirements of the University Representative on oiling, protection and maintenance of equipment during storage. It shall be the Contractor's complete responsibility for the storage and care of the equipment and materials. Material not properly stored prior to installation shall not be considered for payment.

5.2.2 Materials shall be handled in such a manner as to preserve their quality and acceptability for the work.

5.2.3 Contractor shall confine his tools and equipment and the storage of materials to the area delineated in the contract documents as the "Limit of Contract". He shall not load or permit any part of a structure to be loaded with a weight, that will endanger the safety of the structure or any part thereof.

5.2.4 Explosives

(1) Explosives shall not be stored upon any property belonging to the University.
(2) The use of explosives is prohibited on University property.

5.2.5 Paints

(1) Oil base paints and inflammable liquids shall not be stored in large quantities on the project. Containers shall be limited to five gallon size. Any liquid with a flash point of less than one hundred (100) shall be contained in safety cans, UL approved. Liquid with a higher flash point shall be stored in rigid cans.

(2) Oily rags, waste, etc. must be removed from the work site at the close of each working day.

5.3 SUBSTITUTIONS

5.3.1 Should the Contractor desire to substitute another material for one or more specified by name he shall apply, in writing, for such permission and state the credit or extra involved by the use of such material. The University will not consider the substitution of any material different in type or construction methods unless such substitution affects a benefit to the University.

5.3.2 The Contractor shall not submit for approval materials other than those specified without a written statement that such a substitution is proposed. Approval of a "substitute material" by University Representative when the Contractor has not designated such material as a substitute, shall not be binding on the University nor release Contractor from any obligations of his contract, unless the University approves such "substitution" in writing.

5.3.3 It is the prime intent of these specification and/or schedule to define the requirements as to the quality of material, finish and overall workmanship.

5.3.4 The manufacturer's name, trade name, product descriptions and or catalog numbers listed in this specification and/or equipment schedule are for information and not intended to limit competition. The bidder may offer any brand which meets or exceeds these requirements. If bids are based on an equivalent product, indicate on solicitation form the manufacturer's name and number.

5.3.5. The bidder shall explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered as an exception thereto. The State reserves
the right to determine acceptance of item(s) as an approved equivalent. Bids which do not comply with these requirements are subject to rejection. Bids lacking any written indication of intent to bid an alternate brand shall be received and it is assumed that the contract will be completed with equipment/materials as out lined in the specification.

5.4 APPROVED EQUALS

5.4.1 The terms "Or Equal", "Equal", "Approved Equal" are used as synonyms throughout the specifications. They are implied in reference to all named manufacturers in the specifications unless otherwise stated. Only materials fully equal in all details will be considered. The University is the final judge as to equality.

5.5 CONTRACTOR'S OPTIONS

5.5.1 When several products or manufacturers are named in the specifications for the same purpose or use, then the Contractor may select any of those so named. However, all of the units required for, and used in, the project must be the same in material and manufacture.

5.6 TESTS

5.6.1 If the contract documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the University Representative timely notice of its readiness so the University Representative may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities.

5.6.2 If the University determines that any Work requires special inspection, testing, or approval which the contract documents do not include, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in 5.6.1 above. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the contract documents, the Contractor shall bear all costs thereof, additional services made necessary by such failure; otherwise the University shall bear such costs, and an equitable adjustment will be made.
5.6.3  Required certificates of inspection, testing or approval shall be obtained by the Contractor and promptly delivered to the University Representative.

5.7  BUY AMERICAN STEEL

5.7.1  Only steel products made in the United States shall be used or supplied in the performance of this contract or any subcontract thereunder. Steel products include products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed from steel made in the United States. This requirement shall not apply if the University shall have determined that the cost of such steel products is unreasonable or inconsistent with the public interest. The provisions of this paragraph shall not apply where they are in conflict with any Federal grant or regulation affecting this contract.

6.0  LEGAL RELATIONS AND RESPONSIBILITIES

6.1  LAWS TO BE OBSERVED

6.1.1  The Contractor shall keep fully informed of all Federal, State, and Local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders and decrees; he shall protect and indemnify the State and its representatives against any such claim or liability arising from or based on the violation of any law, ordinance, regulation, order, or decree, whether by himself or his employees or subcontractors.

6.1.2  The Contractor must comply with the provisions of the Workmen's Compensation Act and Federal, State and City laws relating to hours of labor.

6.1.3  The provisions of this contract shall be construed, interpreted an enforced according to the Laws of Maryland.

6.1.4  The Contractor shall give all notices and comply with all State and Federal laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified.
6.1.5 If the Contractor observes that the drawings and specifications are at variance with any law, he shall promptly notify the University Representative, and any necessary changes shall be adjusted as provided in the contract for changes in the Work. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the University Representative, he shall bear all costs arising therefrom.

6.2 PERMITS AND LICENSES

6.2.1 The University or its authorized representative will file with the appropriate local authority, drawings and specifications and any pertinent data reasonably proper for their information. The Contractor will be required to pay all necessary fees to local authorities and regulatory agencies having jurisdiction, for inspection or for the privilege or right to execute the work as called for in the contract documents and he shall include the cost of said fees in his base bid.

6.2.2 The Contractor must be licensed as required by Laws of the State of Maryland (Art. 56 Sec. 180, Annotated Code of Maryland) and must be qualified by submission and approval of a Qualification Questionnaire to the University.

6.3 PATENTED DEVICES, MATERIALS AND PROCESSES

6.3.1 The Contractor shall pay for all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the State harmless from loss on account thereof, except that the State shall be responsible for all such loss when a particular process or the product of a particular manufacturer or manufacturers is specified; however, if the Contractor has information that the process or articles specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the University.

6.4 LAND, AIR AND WATER POLLUTION

6.4.1 The Contractor shall incorporate all permanent erosion control features into the work at the earliest practicable time. Temporary pollution control measures will be used to correct conditions that develop during construction that were not foreseen during design, that are needed prior to installation of permanent pollution control features, or that are needed temporarily to
control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.

6.4.2 The Contractor's attention is directed to the fact that temporary pollution control may include measures outside the project site where such work is necessary as a direct result of project construction. The University shall be kept advised of all such off-site control measures taken by the Contractor. This shall not relieve the Contractor of the basic responsibilities for such work.

6.4.3 In case of failure on the part of the Contractor to control erosion, pollution and/or siltation, the University reserves the right to employ outside assistance or to use its own forces to provide the necessary corrective measures. All expenses incurred by the University in the performance of such duties for the Contractor shall be withheld from monies becoming due to the Contractor.

6.4.4 The Contractor must submit evidence to the University that the governing Federal, State and local Air Pollution criteria will be, and were met. This evidence and related documents will be retained by the University for on-site examination.

6.4.5 If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the procurement officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor required by the University as one of the terms of this contract. If it is determined that the order is due in any part to acts or omissions of the Contractor required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the procurement officer in the administration of this contract under the terms of the "Suspension of Work" clause of this contract. The period of such suspension, delay or interruption shall be considered reasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

6.4.6 The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an
adverse effect on the environment or that the University has not duly considered, either substantively or procedurally, the effect of the work on the environment.

6.5 CONTRACTOR'S LIABILITY INSURANCE

6.5.1 The Contractor and its subcontractors shall maintain such insurance as will protect him from claims under Workmen's Compensation Acts, U.S. Longshoremen's and Harbor Workers' Compensation Act, and the Federal Employers Liability Act by coverage with Insurance Companies or by methods acceptable to the State Insurance Commissioner and by no other method, for damages which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them.

6.5.2 He shall protect himself and the University from any claim for Bodily Injury, Liability and Property Damage Liability.

6.5.3 The limits for Bodily Injury Liability shall be not less than $1,000,000/$2,000,000; that is, $1,000,000 is the limit for injury per occurrence and $2,000,000 in the aggregate. The minimum limit for Property Damage Liability shall be $1,000,000 per occurrence and $2,000,000 aggregate.

6.5.4 The above policies for Bodily Injury and Property Damage Liability Insurance shall be so written as to include Contingent Bodily Injury and Property Damage Liability Insurance to protect the Contractor against claims from the operations of subcontractors.

6.5.5 Certificates of the Contractor's insurance containing evidence of the Hold Harmless Clause protecting the University of Maryland shall be filed with the University and shall be subject to their approval for adequacy of protection. No work shall be started at the site until appropriate certificates of insurance are filed with and approved by the Procurement Officer.

6.6 FIRE AND EXTENDED COVERAGE INSURANCE

6.6.1 The Contractor shall carry, at his own expense, Builder's Risk Insurance for the full contract amount, insuring against the perils of Fire, Lightning, Extended Coverage Vandalism and Malicious Mischief, subject only to the minimum standard deductibles.
currently filed by the Insurance Service Office with the State Insurance Commission. University will provide no coverage during the construction period.

6.6.2 The policy shall contain endorsements reading as follows:

(1) This policy also covers as part of the provisional amount, architect's, engineer's, and builder's fees.

(2) Permission is hereby granted for occupancy in whole or in part, pending acceptance by the University.

(3) It is the intent of this insurance to cover specifically all the Work being done under the contract between the Insured's, and as to such Work. This policy shall be primary insurance and shall not contribute or claim contribution from any other insurance being carried, which by its terms, would also cover on the property covered hereunder in the absence of this insurance.

(4) Coverage afforded under this policy will not be canceled until at least 15 days prior written notice has been given to the University.

6.6.3 Certificates of insurance shall be submitted to the University for review and approval and shall be held by it for the duration of the contract. The University shall have the absolute right to terminate this contract if the policy of insurance is canceled at any time for any reason and a new policy is not obtained by the Contractor and approved by the University.

6.6.4 The above insurance shall remain in full force and effect until such time as the University shall fully accept the Work covered by this contract.

6.7 ASSIGNMENTS

6.7.1 The Contractor shall not assign the contract. He shall not sublet it as a whole or sublet it by trades or other portions in an amount of more than 75% of the monetary value of the contract. The remaining 25% shall be executed by the Contractor with labor and materials directly purchased and paid for by the Contractor. Costs of insurance, overhead, supervision, etc., may not be claimed as a portion of the 25% mentioned above. The execution of Work by a subsidiary of the Contractor may or may not be considered direct employment at the discretion of the University. The Contractor shall not
assign any monies due or to become due to him hereunder, without the previous written consent of the University.

6.8 SEPARATE CONTRACTS

6.8.1 University reserves the right to let other contracts in connection with this Work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work, and shall properly connect and coordinate his Work with theirs.

6.8.2 If any part of the Contractor's Work depends on proper execution or results upon the Work of any other Contractor, the Contractor shall inspect and promptly report to the University any defects in such Work that render it unsuitable for such proper execution and results. His failure to so inspect and report shall constitute an acceptance of the other Contractor's Work as fit and proper for the reception of his Work, except as to the defects which may develop in the other Contractor's Work after the execution of his Work.

6.8.3 To insure the proper execution of his subsequent Work, the Contractor shall measure Work already in place and shall at once report to the University any discrepancy between the executed Work and the drawings.

6.9 RELATIONSHIP OF CONTRACTOR TO PUBLIC OFFICIALS AND EMPLOYEES

6.9.1 In carrying out any of the provisions of the contract, or in exercising any power or authority granted to them by or within the scope of the contract, there shall be no liability upon the Procurement Officer or other authorized representatives of the University, it being understood that in all such matters they act solely as agents and representatives of the University.

6.9.2 The University may terminate the right of the Contractor to proceed under this contract if it is found by the Procurement Officer that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the State with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract; the facts upon which the Procurement Officer makes such findings may be reviewed in any competent court.

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6.9.3 In the event this contract is terminated as provided in paragraph 6.9.2 hereof, the State shall be entitled (1) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor, and (2) in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Procurement Officer) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

6.9.4 The rights and remedies of the State provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

6.9.5 Conflict of Interest: No employee of the University of Maryland, or any State commission, agency or branch thereof, whose duties as such employee include matters relating to or affecting the subject matter of this contract, shall, while such employee, become or be an employee of the party or parties hereby contracting with the said State of Maryland, or any University, commission, agency or branch thereof.

6.10 NO WAIVER OF LEGAL RIGHTS

6.10.1 The University shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefore, from showing the true amount and character of the Work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate or certificate is untrue or is incorrectly made, or from showing that the Work or materials do not in fact conform to the requirements of the contract. The University shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment from recovering from the Contractor or his sureties, or both, such damage as it may sustain by reason of his failure to comply with the terms of the contract. Neither the acceptance by the University, or any representative of the University, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the University shall operate as a waiver of any portion of the contract or of any power herein reserved, or of any right to damages.
6.10.2 The waiver by the University of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

6.11 COVENANT AGAINST CONTINGENT FEES

6.11.1 The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the State shall have the right to terminate this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

6.12 ASSIGNMENT OF ANTITRUST CLAIMS

6.12.1 The Contractor sells, transfers and assigns to the University and the State of Maryland all rights, title and interest of and in and to any causes of action arising at any time before the date of this assignment or during the performance of this contract under the Antitrust Laws of the United States, including Section 1 of the Sherman Act, and the Antitrust Law of Maryland relating to the purchase by him or the State of Maryland of any products from any supplier or source whatever that is incorporated in the structure built under the terms of this agreement. The Contractor hereby certifies that the above causes of action are lawfully owned and that no previous assignment of same has been made nor has the same heretofore been attached or pledged in any manner whatsoever.

6.13 FEDERAL PARTICIPATION

6.13.1 When the United States Government pays all or any portion of the cost of a project, the work shall be subject to the inspection of the appropriate Federal Agency. Such inspection shall in no sense make the Federal Government a party to this contract, and will not interfere, in any way, with the rights of either party hereunder.

6.14 DISPUTES

6.14.1 This contract is subject to the provisions of State Finance and Procurement Article, Title 15, Subtitle 2

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6.14.2 Except as may otherwise be provided in the Act or aforesaid regulations, all disputes arising under or as a result of a breach of this contract which are not disposed of by mutual agreement shall be resolved in accordance with this clause.

6.14.3 As used herein, "claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract.

(1) A voucher, invoice, or request for payment that is not in dispute when submitted is not a claim under this clause. However, where the submission is subsequently not acted upon in a reasonable time, or disputed either as to liability or amount, it may be converted to a claim for the purpose of this clause.

(2) A claim by a Contractor shall be made in writing and submitted to the Procurement Officer for decision. A claim by the University shall be the subject of a decision by the Procurement Officer.

6.14.4 When a controversy cannot be resolved by mutual agreement, the Contractor shall submit a written request for final decision to the Procurement Officer. The written request shall set forth all the facts surrounding the controversy.

6.14.5 In connection with any claim under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his claim to the Procurement Officer.

6.14.6 The Procurement Officer shall render a written decision on all claims within 60 days of receipt of the Contractor's written claim, unless the Procurement Officer determines that a longer period is necessary to resolve the claim. This decision shall be furnished to the Contractor, by certified mail, return receipt requested, or by any other method that provides evidence of the receipt. The Procurement Officer's decision shall be deemed the final action of the University.

6.14.7 The Procurement Officer's decision shall be final and conclusive unless the Contractor files a written appeal.
with the Maryland State Board of Contract Appeals within 30 days of receipt of said decision.

6.14.8 Pending resolution of a claim, the Contractor shall proceed diligently with the performance of the contract in accordance with the procurement officer's decision.

6.14.9 Unless a lesser period is provided by applicable statute, regulation, or this Contract, the Contractor must file a written notice of claim with the Procurement Officer within 30 days after the basis for the claim is known or should have been known, whichever is earlier. Contemporaneously with or within 30 days of the filing of a notice of claim, but no later than the date of final payment under the Contract, the Contractor must submit to the Procurement Officer its written claim containing the information specified in COMAR 21.10.04.02.

6.15 CLAIMS

6.15.1 If the Contractor claims that any instructions by drawings or otherwise involve, or may involve, extra cost under this contract, he shall give the University written notice thereof within 15 calendar days after receipt of such instructions or occurrence of an emergency. No claim shall be valid unless so made.

6.15.2 Under no circumstances will overhead or profit be permitted as items of a claim when such overhead or profit are for periods during which a "Stop Work" order is in effect due to an act, error or omission for which the Contractor is responsible.

6.15.3 No profit or overhead which includes rental of equipment and the salaries of supervisory personnel will be allowed the Contractor for stoppage of Work when written notice of such stoppage, or impending stoppage, is not given reasonably in advance to prevent such stoppage.

6.15.4 No claim for extra costs will be granted which includes cost of delays or work stoppage due to strikes, lockouts, fire, unusually, severe weather, avoidable casualties or damage or delay in transportation for which the University or its agents are not responsible; only time extensions, in accordance with Section 7.3 will be granted.

6.15.5 No claim for damage caused by a delay will be allowed unless, within five days of the act or omission causing
the delay, the Contractor notifies the University of the existence of the delay.

6.15.6 No payment will be made for increased payment or performance bond premiums as a result of any act or omission by the University which results in a claim.

6.16 ENTIRE AGREEMENT

6.16.1 The Contract constitutes the entire agreement between the parties hereto and other communications between the parties prior to the execution of the Contract, whether written or oral, with reference to the subject matter of the Contract, are superseded by the agreements contained herein. The Contract may not be modified, amended, changed or altered except by written instrument executed by the parties hereto and approved by the Procurement Officer.

6.16.2 Except as otherwise provided by law, any action permitted or required under the contract documents to be taken by the procurement officer, may be taken by his duly authorized representative who shall include the Chief of Construction Supervision & Inspection.

7.0 PROSECUTION AND PROGRESS OF THE WORK

7.1 NOTICE TO PROCEED

7.1.1 After the contract has been executed, the University will issue to the Contractor a "Notice to Proceed" and this notice will stipulate the date on or before which the Contractor is expected to begin work. The specified contract time shall begin on the day work actually starts or on the day stipulated in the "Notice to Proceed", whichever is earlier. Any preliminary work started, or materials ordered, before receipt of the "Notice to Proceed", shall be at the risk of the Contractor.

7.2 PROSECUTION OF THE WORK

7.2.1 All time limits in the contract documents are of the essence of the contract.

7.2.2 The date of commencement of the Work is the date established in a Notice to Proceed signed by the University.

7.2.3 If the Contractor is delayed at any time in the progress

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of the Work by any act or neglect of the University or any of its officers, agents, or employees, or by any separate Contractor employed by the University, or by any changes ordered in the work, or by labor disputes, fire, unusual delay in transportation, unavoidable casualties, or by any cause which the Procurement Officer determines may justify any delay, then the contract time shall be extended for such time as the Procurement Officer may authorize.

7.2.4 It is expressly understood and agreed by and between the contractor and the University that the time for the completion of the Work is a reasonable time for completion of the same, taking into consideration the average climatic range and the usual business conditions prevailing in the locality of the project.

7.3 PUBLIC CONVENIENCE AND SAFETY

7.3.1 The Contractor at all times shall conduct the work in such a manner as to create the least practicable obstruction to all forms of traffic. The convenience of the general public, tenants, and of the residents along and/or adjacent to the improvement shall be respected. Material stored upon the project shall be placed so as to cause a minimum of obstruction to the public. Sprinkling shall be performed at the direction of the Procurement Officer. The Contractor shall, unless otherwise specified, provide and maintain in passable condition such temporary access, roads and bridges as may be necessary to accommodate traffic diverted from the project under construction, or using the project under construction and shall provide and maintain in a safe condition temporary approaches to, and crossings of, the project. Existing facilities planned to be removed, but which might be of service to the public during construction are not to be disturbed until other and adequate provisions are made. Fire hydrants on or adjacent to the project shall be kept accessible to fire apparatus at all times, and no material or obstruction shall be placed within 15 feet of any such hydrant. Work closed down for the winter or at any other times shall be left entirely accessible at all points to fire apparatus. All footways, gutters, sewer inlets and portions of the project under construction shall not be obstructed more than is absolutely necessary.

7.4 BARRICADES AND WARNING SIGNS

7.4.1 The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights,
danger signals, signs and other control devices, and shall take all necessary precautions for the protection of the work and safety of the public. All highways and other facilities closed to traffic shall be protected by effective barricades, and obstructions shall be illuminated during hours of darkness with electric lights.

7.4.2 The Contractor shall erect warning signs in advance of any place on the project where operations may interfere with the use of the facility by vehicular or pedestrian traffic, and at all other points where the new work crosses or coincides with an existing roadway or traffic lane(s). Such warning signs shall be constructed and erected in accordance with the FHWA Manual on Uniform Traffic Control Devices, or as directed.

7.4.3 In cases where the Contractor's sequence of operations results in grade differentials which would be hazardous to vehicular or pedestrian traffic, the Contractor will, at the direction of the University and at no additional cost to the University provide suitable substantial guardrail to the extent determined by the Procurement Officer.

7.5 PRESERVATION, PROTECTION AND RESTORATION OF PROPERTY

7.5.1 The Contractor shall continuously maintain adequate protection of all his Work from damage and shall protect the University property from injury or loss arising in connection with this contract. He shall repair and indemnify against any such damage, injury or loss, except such as may be directly due to errors in the contract documents or caused by agents or employees of the University. He shall adequately protect adjacent property as provided by law and the contract documents.

7.5.2 The Contractor shall box all trees which are liable to injury by the moving, storing, and working up of materials. He shall use no tree for any attachment or anchorage.

7.5.3 The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public and shall post danger signs warning against the hazards created by such features of construction as protruding nails, hoists, well holes, elevator hatchways, scaffolding, window openings, stairways and falling materials.

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7.5.4 In any emergency affecting the safety of life, or of the Work, or of the adjoining property, the Contractor, without special instruction or authorization is hereby permitted to act, at his discretion, to prevent such threatened loss or injury. If he is specifically instructed by the Procurement Officer to do work in an emergency, the Contractor shall do the work and will be paid compensation as outlined in Section 3.6.

7.5.5 No such extension shall be made for delay occurring more than five days before claim therefor is made in writing to the architect. In the case of continuing cause of delay, only one claim is necessary.

7.6 PROGRESS SCHEDULE AND TIME

7.6.1 Preparation of Work Schedule. The Contractor shall prepare a schedule setting forth his dates for completing various portions of the Work. Included among the tasks set forth on the schedule shall be the dates for submittals to the University and dates for return of the approved submittals. The schedule shall be reviewed by the University for approval of the time within which the University must evaluate the Contractor's submittals. The architect's approval of the Contractor's schedule does not constitute an approval of the entire schedule; it merely constitutes an approval of that portion of the schedule that relates to the University's review of submittals.

7.6.2 Preparation of Critical Path Method Schedules. The Contractor shall submit a CPM, when applicable, to the University after a letter of intent is issued but before the Notice to Proceed. The CPM will be updated monthly to reflect changes and variances in the progress of the project.

7.6.3 If the Contractor fails to prepare and submit to the University a schedule before the existence of a delay, then no claim for extra costs due to delay in the Work shall be recognized or asserted.

7.6.4 Materials Purchased Under Allowance. The University will provide schedules for all materials to be purchased from specified allowances.

7.7 SUSPENSION OF WORK

7.7.1 The University may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work for a period of time as he may determine to be
appropriate for the convenience of the University.

7.7.2 If the performance of all or any part of the work is for an unreasonable period of time, suspended, delayed, or interrupted by an act of the University in the administration of the contract, or by his failure to act within the time specified in this contract (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by an unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or (2) for which an equitable adjustment is provided for or excluded under any other provision of this contract.

7.7.3 No claim under this clause shall be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the University in writing of the act or failure to act involved (but this requirement shall not apply as to a claim, resulting from a suspension order, and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of a suspension, delay, or interruption, but not later than the date of final payment under the contract.

7.8 CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

7.8.1 If the Work should be stopped under an order of any court, or other public authority, for a period of three months, through no act or fault of the Contractor or of anyone employed by him, then the Contractor may, upon seven days written notice to the University, stop work or terminate this contract and receive from the University payment for all complete Work in accordance with Section 7.8 of these General Conditions.

7.9 UNIVERSITY'S RIGHT TO TERMINATE FOR ITS CONVENIENCE

7.9.1 The performance of work under this Contract may be terminated by the University in accordance with this clause in whole, or from time to time in part, whenever the Procurement Officer shall determine that such termination is in the best interest of the University. Any such termination shall be effected by delivery to
the Contractor of a Notice of Termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

7.9.2 After receipt of a Notice of Termination, and except as otherwise directed by the Procurement Officer, the Contractor shall:

(1) Stop work under the Contract on the date and to the extent specified in the Notice of Termination;

(2) Place no further orders on subcontracts for materials, services or facilities except as may be necessary for completion of the portion of the work under the contract as is not terminated;

(3) Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

(4) Assign to the University in the manner, at the times, and to the extent directed by the Procurement Officer, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the University shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(5) Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Procurement Officer to the extent he may require, which approval or ratification shall be final for all the purposes of this clause;

(6) Transfer title and deliver to the University in the manner, at the times, and to the extent, if any, directed by the Procurement Officer, (a) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (b) the completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would have been required to be furnished to the University;

(7) Use his best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Procurement Officer, any property
of the types referred to in (6) above; provided, however, that the Contractor (a) shall not be required to extend credit to any purchaser, and (b) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Procurement Officer; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the University to the Contractor under this Contract or shall otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the procurement officer may direct.

(8) Complete performance of such part of the work as may not have been terminated by the Notice of Termination; and

(9) Take such action as may be necessary, or as the University may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the University has or may acquire an interest. The Contractor may submit to the University a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the University, and may request the University to remove such items or enter into a storage agreement covering them. Not later than 15 days thereafter, the University shall accept title to such items and remove them or enter into a storage agreement covering the same; provided, that the list submitted shall be subject to verification by the Procurement Officer upon removal of the items, or if the items are stored, within 45 days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

7.9.3 After receipt of a Notice of Termination, the Contractor shall submit to the Procurement Officer his termination claim, in the form and with certification prescribed by the Procurement Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Procurement Officer, upon request of the Contractor made in writing within such one year period or authorized extension thereof. However, if the Procurement Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one year
period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Procurement Officer may determine on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

7.9.4

Subject to the provisions of paragraph 7.10.3, the Contractor and the Procurement Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this clause, which amount or amounts may include a reasonable allowance for profit on work done; provided that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total Contract by Contract price of work not terminated. The Contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in paragraph 7.9.5 of this clause, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Procurement Officer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause shall be deemed to limit, restrict, to otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this paragraph.

7.9.5

In the event of the failure of the Contractor and the Procurement Officer to agree, as provided in paragraph 7.9.4, upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, the Procurement Officer shall pay to the Contractor the amounts determined by the Procurement Officer as follows, but without duplication of any amounts agreed upon in accordance with paragraph 7.9.4:

(1) With respect to all Contract work performed prior to the effective date of the Notice of Termination, the total (without duplication of any items) of:

(a) the cost of such work;

(b) the cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in paragraph 7.9.2(5) above, exclusive of the amounts paid or payable on account of supplies or materials delivered or services
furnished by the subcontractor before the effective date of the Notice of Termination of Work under this Contract which amounts shall be included in the cost on account of which payment is made under (a) above;

(c) a sum, as profit on (a) above, determined by the Procurement Officer, to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, no profit shall be included or allowed under this subdivision (c) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and

(2) The reasonable cost of the preservation and protection of property incurred pursuant to paragraph 7.9.2.2(9); and any other reasonable cost incidental to termination of work under this Contract, including expense incidental to the determination of the amount due to the Contractor as the result of the termination of work under this Contract. The total sum to be paid to the Contractor under (1) above shall not exceed the total Contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract price of work not terminated. Except for normal spoilage, and except to the extent that the University shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor under (1) above, the fair value, as determined by the Procurement Officer, of property which is destroyed, lost, stolen, or damaged so as to become undeliverable to the University, or to a buyer pursuant to paragraph 7.9.2(7).

7.9.6 Costs claimed, agreed to, or determined pursuant to paragraphs 7.9.3, 7.9.4, 7.9.5. and 7.9.9 hereof shall be in accordance with COMAR 21.01) as in effect on the date of this contract.

7.9.7 The Contractor shall have the right of appeal, under the clause of this Contract entitled "Disputes", from any determination made by the Procurement Officer, under paragraphs 7.9.3, 7.9.5, or 7.9.9 hereof, except that if the Contractor has failed to submit his claim within the time provided in paragraph 7.9.3 or 7.9.9 hereof, and has failed to request extension of such time, he shall have no such right of appeal. In any case where the Procurement Officer has made a determination of the amount due under paragraphs 7.9.3, 7.9.5, or 7.9.9 hereof, the University shall pay to the Contractor the
following: (1) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Procurement Officer, or (2) if an appeal has been taken, the amount finally determined on such appeal.

7.9.8 On arriving at the amount due the Contractor under this clause there shall be deducted (1) all unliquidated advances or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this contract, (2) any claim which the University may have against the Contractor in connection with this contract, and (3) the agreed price for, or the proceeds of sale of any materials, supplies, or other things acquired by the contractor or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the University.

7.9.9 If the termination hereunder be partial, the Contractor may file with the procurement officer a claim for an equitable adjustment of the price or prices specified in the contract relating to the continued portion of the contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the Contractor for an equitable adjustment under this clause shall be asserted within ninety (90) days from the effective date of the termination notice, unless an extension is granted in writing by the Procurement Officer.

7.9.10 The University may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this contract whenever in the opinion of the Procurement Officer the aggregate of such payments shall be within the amount to which the Contractor shall be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the Contractor to the University upon demand, together with interest computed at the legal rate for period from the date such excess payment is received by the Contractor to the date on which the excess is repaid to the University; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or such later date as determined by the
Procurement Officer by reason of the circumstances.

7.9.11 Unless otherwise provided in this Contract, or by applicable statute, the Contractor shall, from the effective date of termination until the expiration of three years after final settlement under this Contract, preserve and make available to the University at all reasonable times at the office of the Contractor but without direct charge to the University all his books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the work terminated hereunder or, to the extent approved by the Procurement Officer, photographs, or other authentic reproductions thereof.

7.10 TERMINATION FOR DEFAULT - DAMAGES FOR DELAY - TIME EXTENSIONS

7.10.1 If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as shall insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the University may, by written notice to the Contractor, terminate his right to proceed with the work or the part of the work as to which there has been delay. In this event the University may take over the work and prosecute the same to completion, by contract or otherwise, and may take possession of and utilize in completing the work the materials, appliances, and plant as may be on the site of the work and necessary therefor. Whether or not the Contractor's right to proceed with the work is terminated, he and his sureties shall be liable for any damage to the University resulting from refusal or failure to complete the work within the specified time.

7.10.2 Liquidated damages maybe required in the contract and if the University so terminates the Contractor's right to proceed, the resulting damage shall consist of such liquidated damages until a the work is completed or accepted. See attached Exhibit if applicable.

7.10.3 The Contractor's right to proceed may not be so terminated nor the Contractor charged with resulting damages if:

(1) The delay in the completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, acts of the public enemy,
acts of the University in either its sovereign or contractual capacity, acts of another Contractor in the performance of a contract with the University, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any, such delay unless the University grants a further period of time before the date of final payment under the contract, notifies the University in writing of the causes of delay. The Procurement Officer shall ascertain the facts and the extent of the delay and extend the time for completing the work when, in his judgement, the findings of fact justify such an extension, and his findings of fact shall be final and conclusive on the parties, subject only to appeal as provided in the "Disputes" clause of this contract.

7.10.4 If, after notice of termination of the Contractor's right to proceed under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the University, be the same as if the notice of termination had been issued pursuant to the clause. If in the foregoing circumstances, this contract does not contain a clause providing for termination for convenience of the University, the contract shall be equitably adjusted to compensate for the termination and the contract modified accordingly; failure to agree to any such adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes".

7.10.5 The rights and remedies of the University provided in this clause are in addition to any other rights remedies provided by law or under this contract.

7.10.6 As used in paragraph 7.10.4(1) of this clause, the term "subcontractors or suppliers" means subcontractors or suppliers at any tier.
7.11 PARTIAL ACCEPTANCE

7.11.1 If during the construction of Work the University desires to occupy any portion of the project, the University shall have the right to occupy and use those portions of the project which in the opinion of the University Representative can be used for their intended purpose; provided that the conditions of occupancy and use are established and the responsibilities of the Contractor and the University for maintenance, heat, light, utilities, and insurance are mutually agreed to by the Contractor and the University.

7.11.2 Partial occupancy shall in no way relieve the Contractor of his responsibilities under the contract.

7.12 SUBSTANTIAL COMPLETION AND FINAL INSPECTION

7.12.1 When the Work is substantially completed, the Contractor shall notify the University Representative that the Work will be ready for final inspection and test on a definite date. Sufficient notice shall be given to permit the University Representative to schedule the final inspection.

7.12.2 On the basis of the inspection if the University Representative determines that the Work is substantially complete and the project can be occupied or used for its intended purpose, the University Representative shall establish the date of substantial completion and shall state the responsibilities of the University and the Contractor for maintenance, heat, utilities, and insurance and shall fix the time for which the guarantee will begin.

7.12.3 The University Representative shall fix the time within which the Contractor shall complete any remaining items of Work which will be indicated on a list prepared by the University Representative. If the Contractor fails to complete the remaining items so listed in the time stipulated the University shall have the undisputed right to complete the work and deduct any cost incurred from any monies retained under the contract.

7.12.4 Final payment shall not be made until all contract Work is complete to the satisfaction of the University.

7.13 CLEANING-UP

7.13.1 The Contractor, shall at all times keep the construction area, including storage areas used by him, free from
accumulations of waste material or rubbish and prior to completion of the work remove any rubbish from the premises and all tools, scaffolding, equipment, and materials not the property of the University. Upon completion of the construction, the Contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the University Representative.

7.14 GUARANTEES

7.14.1 The Contractor guarantees for a two year period (unless another period is specified), commencing on the date fixed by the parties:

7.14.2 That the Work contains no faulty or imperfect material or equipment or any imperfect, careless, or unskilled workmanship.

7.14.3 That all mechanical and electrical equipment, machines, devices, etc. shall be adequate for the use to which they are intended, and shall operate with ordinary care and attention in a satisfactory and efficient manner.

7.14.4 That he will re-execute, correct, repair, or remove and replace with proper Work, without cost to the University, any work found not to be as guaranteed by this section. The Contractor shall also make good all damages caused to other Work or materials in the process of complying with this section.

7.14.5 That the entire work shall be water-tight and leak-proof in every particular.

7.15 NOTICE TO UNIVERSITY OF LABOR DISPUTES

7.15.1 Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the University Representative.

7.15.2 The Contractor agrees to insert the substance of this clause, including this paragraph 7.16.2, in any subcontract hereunder as to which a labor dispute may delay the timely performance of this contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify his next higher
tier subcontractor, or the prime Contractor, as the case may be, of all relevant information with respect to such dispute.

8.0 PAYMENTS

8.1 SCOPE OF PAYMENT

8.1.1 Payments are made on the valuation of Work accomplishment and on account of materials delivered on the site, for incorporation in the Work which are suitably stored and protected.

8.1.2 Payments shall also be made on account of materials or equipment for incorporation in the Work but stored at some off-site location agreed upon by the University; such payment to be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the University to establish the University's title to such materials or equipment or otherwise protect the University's interest including applicable insurance and transportation to site.

8.1.3 Prior to application for first payment, the Contractor shall submit to the University a schedule of values of the various parts of the Work, including quantities, aggregating the total sum of the contract. This schedule shall be so divided as to facilitate payments to subcontractors. The form of this submission shall be as the Contractor and the University have agreed upon and shall be supported by such evidence as to its correctness as the University may direct. This schedule shall be used as a basis for certificates of payments unless at a later date found to be in error.

8.1.4 Application for payment shall be submitted on or about the 25th day of each month but not less than 30 days after the "Work Initiation Conference" nor before ten days of job operation (job shut-down days excluded).

8.1.5 In applying for payments the Contractor shall submit a statement, based upon the schedule, (8.1.3 above) itemized in such form and supported by such evidence as the University may require, showing the Contractor's right to the payment claimed. Each invoice shall prominently display the Contractor's Federal Employer's Tax Identification Number, or (if he has no such number) his social security number.

(1) In applying for all payments, excluding the first payment
and final payment, the Contractor shall submit in addition to the above a certificate that he has paid:

(a) All labor to date.

(b) All vendors and material suppliers in full for all item received.

(c) All subcontractors in full, less the retained amount.

(2) In applying for the final payment, the Contractor shall submit in addition to the statement required in the first part of paragraph 8.1.5 above, the following:

(a) In all cases, the University may demand such evidence as will establish the University's title to materials and give reasonable assurance that causes for liens by labor and others do not exist.

(b) An electrical certificate from an independent (non-governmental) electrical inspection agency approved by the State of Maryland Fire Marshal must be submitted to the University prior to or with the final payment invoice. The Contractor must make application for the inspection, coordinate same, and pay the required inspection fees. The independent electrical inspection agencies are not considered local authorities.

(c) All other guarantees as called for by the contract.

(d) All required equipment manuals and parts lists.

8.2 FORCE ACCOUNT WORK

8.2.1 When the Contractor is required to perform work as a result of additions or changes to the contract for which there are no applicable unit prices in the contract, the University and Contractor shall make every effort to come to an agreed upon price for the performance of such work. If an agreement cannot be reached, the University may require the Contractor to do such work on a force account basis to be compensated in accordance with the following:

(1) Labor. For all labor and for foremen in direct charge of the specific operations, the Contractor shall receive the actual wages for each and every hour that said labor and foremen are actually engaged in such work. The Contractor shall receive the actual costs paid to, or in
behalf of, workmen by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

(2) Materials: For materials accepted by the University and used, the Contractor shall receive the actual cost of such materials delivered on the work, including transportation paid by him (exclusive of machinery rentals as hereinafter set forth).

(3) Equipment. For any machinery or special equipment (other than small tools, whether rented or owned), the Contractor shall receive the rates agreed upon in writing before such work is begun, or the Contractor shall receive those rates which may be specified elsewhere in the contract. For purpose of definition, equipment with a new cost of $500 or less will be considered small tools.

(4) Materials and Supplies Not Incorporated in the Work. For materials and supplies expended in the performance of the work (excluding those required for rented equipment) and approved by the University, the Contractor shall receive the actual cost of such materials and supplies used.

(5) Bond, Insurance, and Tax. For bond premiums, property damage, liability, and workmen's compensation insurance premiums, unemployment insurance contributions and social taxes on the force account work, the Contractor and University shall determine an equitable percent to be applied against the labor cost (premium pay and fringes excluded).

(6) Subcontractors. For work done solely by a subcontractor, the subcontractor's cost shall be determined as stipulated in Section 8.2.1(1) through (5). The allowable percentages for combined overhead and profit for the subcontractor shall be as stipulated hereinafter under sub-paragraph (8). The Contractor shall be entitled to an allowance of eight percent (8%) of the subcontractor's total cost of doing the Work.

(7) Superintendence. No additional allowance shall be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
(8) Contractor's Overhead and Profit. The Contractor will be paid for work done performed by his own forces a percentage thereof, as his overhead and profit, at the following scale:

<table>
<thead>
<tr>
<th>Value of Force Account Work</th>
<th>Combined Overhead and Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 0 - $ 1,000</td>
<td>25%</td>
</tr>
<tr>
<td>$ 1,001 - $ 5,000</td>
<td>20%</td>
</tr>
<tr>
<td>$ 5,001 - $10,000</td>
<td>17%</td>
</tr>
<tr>
<td>$10,001 - $25,000</td>
<td>15%</td>
</tr>
<tr>
<td>Over - $25,000</td>
<td>Negotiated, but not more than 15%</td>
</tr>
</tbody>
</table>

8.2.2 Compensation. The compensation as set forth above shall be received by the Contractor as payment in full for the work done on a force account basis. At the end of each day, the Contractor's representative and the University Representative shall compare records of the cost of work as ordered on a force account basis.

8.2.3 Statements. No payment will be made for work performed on a force account basis until the Contractor furnishes the University duplicate itemized statements of the cost of such force account work detailed as to the following:

1. Name, classification, date, daily hours, total hours, rate, and extension for such laborer, foreman.

2. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

3. Quantities of materials, prices, and extensions,

4. Transportation of materials.

5. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

6. Payments of items under paragraphs (3) and (4) shall be accompanied by original receipted invoices for materials used and transportation charges. If, however, the materials used in the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the original invoices, the statements shall contain or be accompanied by an affidavit of the Contractor which shall certify that such materials were taken from his stock, that the
quantity claimed was actually used and that the price and transportation of the material as claimed represent actual cost.

8.3 CASH ALLOWANCES

8.3.1 Whenever an allowance is mentioned in the specifications, then the Contractor shall include in his contract sum the entire amount of such specified allowances. The expenditure of these allowances is at the University Representative's direction. However, the allowance expenditure is limited to items properly inferable from the title of the allowance. Unexpended balances are to revert to the University. The cost of installation of materials purchased with these specified allowances and other expenses, and Contractor's profit are not included in the allowance. The Contractor shall install all material purchased under allowances and shall include in the contract sum a sufficient amount, in addition to the allowance to cover the installation, other, costs and profit.

8.4 CERTIFICATES OF PAYMENT

8.4.1 If the Contractor has made application as above, the University shall, not later than the date when such payment falls due, issue to the Contractor a certificate for such amount as it decides to be properly due. In approving such partial payments, there shall be retained five percent (5%) of the estimated amount due, for contracts valued at $50,000 or more, until completion and acceptance of all Work covered by the contract.

8.4.2 If the contract provides for retainage, any such retainage that remains with the University after release of the semi-final payment shall be deposited with the University's Escrow Agent. Such retainage shall accrue interest in the name of the Contractor at a rate or rates to be determined by the University's Escrow Agent. In order for the Contractor's retainage to be placed in an account with the University's Escrow Agent, the Contractor shall be required to complete the Internal Revenue Service's Form W-9, "Payer's Request for Taxpayer Identification Number." The Form W-9 shall be provided by the University to the Contractor at the time semi-final payment is approved.

8.4.3 No certificate issued nor payment made to the Contractor, nor partial or entire use or occupancy of the Work by the University, shall be an acceptance of
any Work or materials not in accordance with this contract.

8.5 LIENS

8.5.1. Neither the final payment nor any part of the retained percentage shall become due until the contractor certifies in writing to the University that all payments to sub-contractors and suppliers have been made and all liens against the contractor in connection with work have been satisfied.

8.5.2 Standard form obtained from the University Representative, completed, signed, and notarized shall accompany payment request.

8.6 DEDUCTIONS FOR UNCORRECTED WORK

8.6.1 If the University deems it inexpedient to correct work injured or done not in accordance with the contract, an equitable deduction from the contract price shall be made therefor.

8.7 PAYMENTS WITHHELD

8.7.1 The University may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to such extent as may be necessary to protect the University from loss on account of:

(1) Defective work not remedied.

(2) Claims filed or reasonable evidence indicating probable filing of claims.

(3) Failure of the Contractor to make payments properly to subcontractors for material or labor.

(4) A reasonable doubt that the contract can be completed for the balance then unpaid.

(5) Damage to another Contractor

8.7.2 When the above grounds are removed, payment shall be made for amounts withheld because of them.

8.8 CORRECTION OF WORK BEFORE FINAL PAYMENT

8.8.1 The Contractor shall promptly remove from the premises all materials condemned by the University as failing to
conform to the contract, whether incorporated in the Work or not. The Contractor shall promptly replace and re-execute his own work in accordance with the contract and without expense to the University and shall bear the expense of making good all Work of other Contractors destroyed or damaged by such removal or replacement.

8.8.2 If the Contractor does not remove such condemned Work and materials within a reasonable time, fixed by written notice, the University may remove them and may store the materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal within ten days time thereafter, the University may, upon ten days notice, sell such materials and shall account for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

8.9 ACCEPTANCE AND FINAL PAYMENT

8.9.1 When the Contractor has completed the work and it has been finally accepted, the University will promptly proceed to make any necessary final surveys and complete any necessary computation of quantities. This tabulation shall be accompanied by a statement setting forth (1) the additional work performed under change orders, (2) the authorized extension of time, (3) the number of days which have been charged against the Contractor as having been used to complete the contract, (4) any deductions, charges or liquidated damages which have been made or imposed, and (5) any retainer plus interest, less adjustments for any administrative and other costs for maintaining the Escrow account. Payment for the full apparent value of the contract thus determined shall become due and payable to the Contractor within 90 days after acceptance of the project by the University for maintenance, as hereinafter provided. As a condition precedent to final payment, the Contractor shall be required to execute a general release of all claims against the University arising out of or in any way connected with this contract.

8.9.2 The Contractor shall then have a period of ten calendar days, dating from the date upon which he received the aforementioned tabulation from the University, in which (1) to decide whether or not he will accept final payment upon such a basis, and (2) to notify the University, in writing, of his decision. The Contractor may request an additional period up to ten
calendar days in which to notify the University of his decision. In the event the Contractor notifies the University that he protests final payment on such a basis, that notification shall outline the reason(s) for said protest.

8.9.3 Upon acceptance of the project by the University, the Contractor shall prepare the Final Payment forms and submit them to the University. These forms shall show all data noted in paragraph 8.8.1 above, together with deductions for all prior payments. Once received, the University shall obtain the University Representatives approval and then make payment. If the contract provides for a retainer, Contractor will receive the full amount of the retainer plus accrued interest from the date the retainer is deposited with the University's Escrow Agent. Interest on said retainer shall accrue at a rate determined by the Escrow Agent. Such action shall be deemed to constitute Acceptance and Final Payment.

8.9.4 If, under the provisions of paragraph 8.9.2 above, the Contractor notifies the University of his protest and non-acceptance of the data submitted to him, the University shall pay the Contractor a Semi-Final Estimate, or an Additional Semi-Final Estimate in the event a Semi-Final Estimate has already been paid in accordance with the information noted in paragraph 8.8.1 above, with deductions for all prior payments and a retainage equal to 1-1/2% of the total value of the contract. The acceptance of such Semi-Final Estimate, or additional Semi-Final Estimate, shall not be considered as a waiver on the part of the Contractor of his right to pursue his protest and press for Acceptance and Final Payment.

8.9.5 In the event the Contractor does not accept the data submitted to him as described in paragraph 8.9.1 above and/or has outstanding a claim filed with the University, the University and the Contractor shall confer at mutually convenient times and endeavor to reconcile all points of disagreement expeditiously. If such reconciliation is accomplished, the University will promptly proceed with Acceptance and Final Payment on the reconciled basis and in accordance with the provisions of paragraph 8.9.3 above. If reconciliation is not accomplished within 30 days, (a) the University shall submit to the procurement officer the Final Estimate and Final Payment forms he is then recommending, together with whatever data the Contractor may have submitted to him in support of his protest(s) regarding the various factors in dispute; (b) copy of letter of
transmittal will be sent to Contractor by registered mail. The Contractor shall submit to the University, within 10 days after receipt of said registered mail, a written statement for review and final action. The decision of the University shall be final and no further appeal will be considered. Such decision by the University and payment by the University shall be deemed to constitute Acceptance and Final Payment.

8.9.6 All prior partial estimates and payments shall be subject to correction at the time of Acceptance and Final Payment and if the Contractor has been previously over-paid, the amount of such overpayment shall be set forth in the Final Payment forms and the Contractor hereby agrees that he will reimburse the University for such overpayment within six months of receipt of such advice, and his surety will not be granted release from obligations under the terms of the contract until reimbursement has been made in full.

8.10 PAYMENT OF INTEREST

8.10.1 The State Finance and Procurement Article, Sections 15-101 thru 15-105 provides that the University shall remit payment to the Contractor within 45 days after receipt of a "proper invoice." The University's failure to remit payment within this period may entitle the Contractor to interest at the rate of 10% per annum, beginning on the 31st day. A proper invoice shall include a description of items or services provided; the date the goods were received by the ordering agency/University; or the inclusive dates the services were rendered; the price agreed upon pursuant to the contract; the basis for the billing; the purchase order or contract identification number; the Contractor's Federal Employers Identification Number or Social Security Number; and the name and address of the proper invoice recipient for the state agency, as specified in the contract.

For purposes of this contract, an amount will not be deemed "due and payable" and interest payments will not be authorized for late payments unless the following conditions have been met:

(1) The amount invoiced is consistent with the amount agreed upon by the parties to the contract pursuant to the contractual agreement.

(2) The goods and/or services have been received by the University and the quantity received agrees with the quantity ordered.

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(3) The goods and/or services meet the qualitative requirements of the contract and have been accepted by the University.

(4) The proper invoice has bee received by the party or unit of government specified in the agreement.

(5) The invoice is not in dispute.

(6) If the contract provides for progress payments, the proper invoice for the progress payment has been submitted pursuant to the schedule contained in the contract.

(7) If the contract provides for withholding a retainage and the invoice is for the retainage, all stipulated conditions for release of the retainage have been met. In order to receive payment of interest, the Contractor must submit a proper invoice for accrued interest within 30 calendar days after the payment date of the amount on which the interest accrued. Interest may not be claimed (1) if a claim has been filed under Section 17-201 of the State Finance & Procurement Article, (2) for more than one year following the 31st calendar day after the date that a proper invoice is received by a State Agency, (3) on an amount representing unpaid interest, or (4) on an amount due under a procurement contract remaining unpaid for any period prior to July 1, 1983.

8.11 AUDITS BY THE STATE

8.11.1 The Contractor agrees that the State or any of its duly authorized representatives shall, until the expiration of three years after final payment under this contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this contract.

8.11.2 The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the State, or any of its duly authorized representatives shall, until the expiration of three years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract.
9.0 EMPLOYEES, SUBCONTRACTORS AND WORK CONDITIONS

9.1 EMPLOYEES AND WORKMANSHIP

9.1.1 Qualification of Employees. Only personnel thoroughly trained and skilled in the task assigned them may be employed on any portion of the Work. Any employee found to be unskilled or untrained in his work shall be removed from the Work.

9.1.2 Licensed Employees. When Municipal, County, State or Federal laws require that certain personnel (electricians, plumbers, etc.) be licensed, then all such personnel employed on the Work shall be so licensed.

9.1.3 Quantity of Labor. The Contractor shall employ on the Work, at all times, sufficient personnel to complete the Work within the time stated in the contract.

9.1.4 Work Areas. The Contractor shall confine the operations of his employees to the limits as provided by law, ordinance, permits or directions of the University. Generally, the work area will be the same as the "Limit of Contract" line indicated in the construction documents.

9.1.5 Methods and Quality

(1) All workmanship shall be of good quality. Whenever the method of the Work or manner of procedure is not specifically stated in the contract documents, then it is intended that the best standard practice shall be followed. Recommendations of the manufacturers of approved materials shall be considered as a part of these specifications and all materials shall be applied, installed, connected, erected, used, cleaned and conditioned as so called for thereby. This, however, does not remove any requirement in these specifications to add to the manufacturer's recommendations.

(2) All materials shall be accurately assembled, set, etc., and when so required in good construction, shall be true to line, even, square, plumb, level and regularly spaced, coursed, etc. Under no circumstances, either in new or old Work shall any material be applied over another which has not been thoroughly cleaned, sanded, or otherwise treated so as not to impair the finish, adhesion or efficiency of the next applied item.
All methods, procedure and results are subject to the University's, approval as to finished result to be obtained. However, this is not to be interpreted as placing upon the architect any responsibility for the "Work" management which is solely the responsibility of the Contractor.

9.1.6 Scheduling

1. The Contractor shall so schedule the Work as to ensure efficient and uninterrupted progress and to hold to an absolute minimum the cutting, and patching of new Work. All cutting, patching and digging necessary to the execution of the Work is included.

2. The Contractor shall so schedule the construction performed by each group or trade that each installation or portion of the construction shall member with and join with every other new or old Work as required for a complete installation, all according to accepted good construction practice.

9.1.7 Superintendent. The Contractor shall keep on the Work, at all times during its progress, a competent, English-speaking superintendent and any necessary assistants, all approved by the University prior to commencement of the Work. The Contractor shall submit in writing to the University the name of the person it intends to employ as superintendent for the execution of this contract with a statement of the proposed superintendent's qualifications. This data will be reviewed by the University and an approval or rejection given in writing. Persons who have previously proved unsatisfactory on work executed for the University of Maryland, or who are without proper qualifications, will not be approved. Should it be necessary to change the superintendent, this procedure will be repeated. A single superintendent will be permitted to superintend two or more jobs located at the same institution or close to each other only when approved by the University in writing. The superintendent shall represent the Contractor. All directions given to the superintendent shall be as binding as it given to the Contractor. Important directions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case should the Superintendent be complained of by the University for cause, he shall be removed from the Work and a new Superintendent obtained and approved as described above.
9.1.8 Discipline. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ or permit to remain on the Work any unfit person. He shall enforce all instructions relative to use of water, heat, power, no smoking, and control and use of fires as required by law, and the University. Employees must not be allowed to loiter on the premises before or after working hours.

9.1.9 Employee Safety. The Contractor shall designate a responsible member of his organization, on the Work, whose duty it shall be, in addition to his other duties, to prevent accidents and to enforce the standards of 9.6 of these conditions. The name and position of the person so designated shall be reported to the University by the Contractor at the commencement of the Work.

9.2 NON-DISCRIMINATION – EMPLOYMENT POLICIES

9.2.1 Acceptance of a contract based on these specifications constitutes agreement by the Contractor to comply with State policy as established by joint Resolution No. 16 of the General Assembly of 1958, which is:

"That on all public works being paid for in whole or in part with State or other public funds, preference shall be given to available persons who have been residents of Maryland for a period of at least six (6) months immediately prior to availability of positions for employment of laborers, mechanics and others, not including supervisory personnel not to exceed ten percent of the total working force."

9.2.2 The contents of Section 13-219 of the State Finance & Procurement Article is called to the attention of the Contractor and subcontractors, which is as follows:

(a) A contract subject to this Article may not be awarded to any Contractor unless the contract contains provisions obligating that Contractor not to discriminate in any manner against any employee or applicant for employment because of sex, race, creed, color, national origin or age and obligating the Contractor to include a similar clause in all subcontracts, except subcontracts for standard commercial supplies or raw materials. In addition, the Contractor and subcontractor shall agree to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of the nondiscrimination clause.
(b) Failure to include such a contract provision renders any contract void ab initio, but any party shall be entitled to the reasonable value of services performed and materials supplied. However, the State may elect to compel the performance of any contract under this section not containing the nondiscrimination provisions, but recovery against the proper party shall be limited to the reasonable value of services performed and materials supplied.

(c) Where the Contractor willfully fails to comply with the nondiscrimination provision the State may, where the contract is still executory in part, compel continued performances of the contract, but it shall be liable only for the reasonable value of services performed and materials supplied from the date that the breach of contract was discovered or should have been discovered, and any sums previously paid by the State under the contract, shall be set off against the sums to become due as the contract is performed.

(d) If the sub-Contractor willfully fails to comply with the nondiscrimination provisions, the Contractor may void the contract note and shall be liable only for the reasonable value of the services performed and materials supplied.

(e) Any person, whether an employee, prospective employee or not, with information concerning violations of the requirements of this section may inform the Board of Public Works which shall cause an immediate investigation of the charges. If the Board concludes that the charges are true it shall invoke the remedies set out in this section.

9.2.3 The Governor's Executive Order pertaining to the Code of Fair Practices, dated July 9, 1976, bars discrimination on account of political or religious opinion or affiliation in addition to the discriminations listed above.

9.2.4 It is understood that the provisions of the Civil Rights Act of 1961, are hereby included in this contract to the end that no person in the United States shall, on the ground of race, color, or natural origin, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination under this Agreement.

9.2.5 The Contractor, subcontractor or agent of either, insofar as possible, shall secure labor through the
Maryland State Employment Service of the Maryland University of Human Resources, except where the Contractor has entered into a collective bargaining agreement under which labor is to be provided by the union. The Contractor is not required to conform to these provisions unless the Contractor and the union arrange with the Maryland State Employment Service for referral of such labor as they may mutually agree shall be referred. The Contractor shall be the sole judge of the competency or fitness and for satisfactory, service of any laborer referred to him by the Maryland State Employment Service.

9.2.6 Each Contractor with the University will submit to the Board of Public Works, at the Board's request, information as to the composition of the Contractor's work force. This information will be furnished on a form to be prescribed by the Board of Public Works.

9.2.7 The Contractor and all subcontractors will develop and maintain an Affirmative Action Plan directed at increasing the utilization of women and members of minority groups on State Public Works projects. Approval of that plan by the Board of Public Works shall be a prerequisite to the award of any contract for Public Works by the State or any agency of the State. The Affirmative Action Plan referred to in the preceding sentence shall contain written provisions and procedures for each of the following:

(1) Notification of established community organizations of employment opportunities, and the maintenance of records on responses by such organizations and their disposition.

(2) Maintenance of records, including name and address, of women and members of minority groups applying or referred for employment. The records shall indicate what disposition was made of the application. If such an applicant was not sent to a union hiring hall for referral or if such an applicant was not employed by the Contractor, the records shall indicate the reasons therefor.

(3) Notifications by the Contractor to the University if any union or unions with whom the Contractor has a collective bargaining agreement has not referred to the Contractor a woman or member of a minority group sent by the Contractor, or if the Contractor has other information that the union referral process is impending efforts for the utilization of women and members of minority groups.
(4) Participation in training programs, including those funded by the United States Government.

(5) Procedures for disseminating notice of the Contractor's equal employment opportunity policy by publicizing it through company newspapers and annual reports, conducting staff, employee and union representatives' meetings, posting, and by specific review with employees who are women or, members of minority groups.

(6) Procedures for disseminating notice of the Contractor's equal employment opportunity policy externally through review with all recruitment sources, advertising in news media, and discussion with sub-Contractors and suppliers.

(7) Recruitment efforts directed at minority organizations, schools with minority students, and minority recruitment and training organizations.

(8) Validation of all specifications selection requirements, and tests relating to employment.

(9) Procedures for promoting after-school, summer, and vacation employment to minority youth.

(10) Programs for the development of on-the-job training opportunities and participation and assistance in any association or employer group training programs.

(11) Programs for evaluating women and minority personnel for promotion opportunities and encouragement of such employees to seek those opportunities.

(12) Review of seniority practices and job classifications to insure that they do not have an improper discriminatory effect.

(13) Monitoring of personnel activities to insure that the Contractor's equal employment opportunity policy is being carried out.

(14) Proposals for soliciting bids for subcontracts from available minority sub-Contractors engaged in the trades covered by the bid conditions.

(15) Provision for reasonable accommodation to be made for handicapped applicants and qualified handicapped individuals.

(16) Provision for ensuring a work environment free from sexual harassment.
9.3 SUBCONTRACTS

9.3.1 The Contractor shall, as soon as practicable and before the execution of the contract, notify the University Representative in writing, of the names of subcontractors proposed for the principal parts of the work and for such others as the University may direct and shall not employ any that the University may object to as incompetent or unfit.

9.3.2 The Contractor agrees that he is as fully responsible to the University for the acts and omissions of his subcontractors and of persons either directly employed by them, as he is for the acts and omissions of persons directly employed by him.

9.3.3 Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the University, and nothing in the contract documents is intended to make the subcontractor a beneficiary of the contract between the University and the Contractor.

9.4 RELATION OF CONTRACTOR AND SUBCONTRACTOR

9.4.1 The Contractor agrees to bind every subcontractor and will see that every subcontractor agrees to be bound by the terms of the Agreement, the General Conditions, the Drawings and Specifications as far as applicable to the Work, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the University.

9.4.2 The Contractor agrees to include the following provisions in all subcontracts and supply contracts applicable to the work. Subcontractor agrees to be bound to the Contractor by the terms of the Agreement, General Conditions, Drawings and Specifications, and to assume toward him all obligations and responsibilities that he, by those documents, assumes toward the University.

(1) The subcontractor agrees to submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment under Section 8 of these General Conditions.

(2) The subcontractor agrees to make all claims for extras, for extensions of time, and for damages for delays or otherwise, to the Contractor in the manner provided in the General Conditions for like claims by the Contractor.
upon the University, except that the time for making claims for extra cost is five days.

(3) The subcontractor agrees, upon completion of his Work, to promptly pay all labor, material suppliers, vendors, subcontractors and others, to permit simultaneous final payment by the Contractor.

9.4.3 The Contractor agrees to be bound to the subcontractor by all the obligations that the University assumes to the Contractor under the Agreement, General Conditions, Drawings, and Specifications, and by all the provisions thereof affording remedies and redress to the Contractor from the University.

(1) The Contractor also agrees to pay the subcontractor, upon the payment of certificates, if issued under the schedule of values described in Section 8 of these General Conditions, the amount allowed to the Contractor on account of the subcontractors Work to the extent of the subcontractor's interest therein.

(2) To pay the subcontractor, upon the payment of certificates, so that all at times his total payments shall be as large in proportion to the value of the Work done by him as the total amount certified to the Contractor is to the value of the Work done by him.

(3) To pay the subcontractor to such extent as may be provided by, the contract documents or the sub-contract, if either of these provides for earlier or larger payments than the above.

(4) To pay the subcontractor on demand for his Work or materials as far as executed and fixed in place, less the retained percentage, at the time the certificate should be issued, even though the University Representative fails to issue it for any cause not the fault of the subcontractor.

(5) To pay the subcontractor a just share of any fire insurance money received by the Contractor.

(6) To make no demand for liquidated damages or penalty for delay in any sum in excess of such amount as may be specifically named in the subcontract.

(7) To give the subcontractor an opportunity to be present and to submit evidence in any matter involving his rights.
9.4.4 That no claim for services rendered or materials furnished by the Contractor to the subcontractor shall be valid unless written notice thereof is given by the Contractor to the subcontractor during the first ten days of the calendar month following that in which the claim originated.

9.4.5 The Contractor and the subcontractor agree that nothing in this section shall create any obligation on the part of the University to pay to or to see to the payment of any sums to any subcontractor.

9.5 PREVAILING WAGE RATES

9.5.1 All contracts in the amount of $500,000 or more shall be subject to the provisions of State Finance & Procurement Article, Sections 17-201, et seq., Annotated Code of Maryland. Where an original contract is in an amount less than $500,000 the terms of State Finance & Procurement Article, Section 17-201, shall not apply, even where subsequent change orders shall increase the total Contract in excess of $500,000. Wage rates applicable to projects of $500,000 or more are attached to the specification. Federal wage rates shall be in effect where applicable.

9.6 CONSTRUCTION SAFETY AND HEALTH STANDARDS

9.6.1 It is a condition of this contract, and shall be made a condition of each subcontract entered into pursuant to this contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards, laws and regulations of the locality in which the Work is done, the State, and the Federal government.

9.7 DRUG AND ALCOHOL FREE WORKPLACE

9.7.1 The Contractor warrants that the Contractor shall comply with COMAR 21.11.08 Drug and Alcohol Free Workplace, and that the Contractor shall remain in compliance throughout the term of the Contract.
10.0 MINORITY BUSINESS ENTERPRISE UTILIZATION

10.1 PURPOSE

10.1.1 The Contractor shall structure his procedures for the performance of the construction services required by this contract to attempt to achieve the result that a minimum of 10 percent of the total dollar value of the contract is performed directly or indirectly by minority business enterprise. Such performance by minority business enterprise shall be in accordance with this section. The provisions of this section are applicable to contracts with a value of $25,000 or more. The Contractor agrees to use his best efforts to carry out the requirements of this section consistent with efficient performance of the project.

10.2 DEFINITIONS

10.2.1 As used in this section, the following words have the meanings indicated.

A. "Certification" means a determination through the procedures outlined in COMAR 21.11.03.15 and 21.11.03.16 that a legal entity is a minority business enterprise.

B. "Control" means the exercise of the power to manage and operate a business enterprise.

C. The Procurement Officer will act as the "MBE Liaison Officer" to administer the University's Minority Business Enterprise (MBE) Program.

D. "Minority Business Enterprise" or "MBE" means any legal entity, other than a joint venture, organized to engage in commercial transactions, that is at least 51 percent owned and controlled by one or more minority persons, or a nonprofit entity organized to promote the interests of the physically or mentally disabled.

E. "Minority Business Enterprise Certification Council" or "MBECC" is that Council created to administer the certification of minority business enterprises planning to do business with the State, except for those business entities desiring to contract with the Maryland Department of Transportation. The Certification Council is responsible for recertification and decertification determinations. The MBECC consists of one voting representative from the following State Agencies:
(1) The Department of Budget and Fiscal Planning;

(2) The Department of General Services;

(3) The Interagency Committee on Public School Construction;

(4) The Maryland Food Center Authority;

(5) The Office of Minority Affairs;

(6) The University of Maryland; and

(7) Three procurement agencies selected periodically by the Board of Public Works.

F. "Minority person" means a member of a socially or economically disadvantaged minority group, and includes Blacks (not of Hispanic origin), Hispanics, American Indians, Alaska natives, Asians, Pacific Islanders, women, and the physically or mentally disabled.

G. "Office of Minority Affairs" means the Governor's Office of Minority Affairs.

H. "Ownership" means:

(1) For a sole proprietorship, that the sole proprietor is a minority person. If the ownership interest held by a minority person is subject to formal or informal restrictions such as options, security interest, agreements, etc., held by a non-minority person or business entity, the options, security interest, agreements, etc., held by the non-minority person or business entity may not significantly impair the minority person's ownership interest.

(2) For a partnership, that at least 51 percent of the partnership's assets or interests are owned by a minority person or minority persons. If the ownership interest is held by a minority person is subject to formal or informal restrictions such as options, security interests, agreements, etc., held by a non-minority person or business entity, the options, security interests, agreements, etc., held by a non-minority person or
business entity may not significantly impair the minority person's ownership interest.

(3) For a corporation, that legal and equitable ownership of at least 51 percent of all classes of stock, bonds, or other securities issued by the corporation is owned by a minority person or minority persons. If an ownership interest held by a minority person is subject to formal to informal restrictions such as options, security interests, agreements, etc., held by a non-minority person or business entity, the options, security interests, agreements, etc., held by the non-minority person or business entity may not significantly impair the minority person's ownership interest.

I. "Procurement agency" means any State agency, except a University, that is authorized by law or regulations to procure or contract.

J. "Solicitation notice" means public notice of a solicitation for bids, offers, or expressions of interest which contains the nature of the procurement, relevant dates, the availability of solicitation documents, if any, and other pertinent information. The notice may consist of but is not limited to:

(1) Legal advertisement;
(2) Newspaper notice;
(3) Bid Board notice; or
(4) Bid or proposal documents including the invitation for bids or request for proposals.

10.3 CONTRACTOR RESPONSIBILITIES

10.3.1 MBE subcontract participation goal of a minimum of 10 percent of the contract has been established for this procurement. The Contractor agrees that this amount of the contract will be performed by minority business enterprises.

10.3.2 A MBE prime Contractor responding to the solicitation shall, if awarded the contract, accomplish an amount of work not less than the MBE subcontract goal with his own workforce, MBE subcontractors, or both in combination. The documentation requirements of 10.3.4 below, are applicable only if MBE subcontractors are to be utilized in the performance of the contract. The
MBE prime Contractor shall, however, be certified in accordance with 10.3.4(4) below.

10.3.3 Each bid or offer submitted in response to this solicitation shall be accompanied by a completed MBE Utilization Affidavit whereby the Contractor acknowledges the MBE participation goal and commits to make a good faith effort to achieve the goal.

10.3.4 Documentation. The following documentation shall be part of the contract, and shall be furnished by the apparent low bidder to the MBE liaison office within ten (10) working days from notification that the Contractor is the apparent low bidder or within ten (10) working days following the award, whichever is earlier. If the contract has been awarded and the following documentation is not furnished, the award shall be null and void

(1) A completed Schedule For Participation naming each MBE who will participate in the project that describes the contract items to be performed or furnished by the MBE, the proposed timetable for performance and the prices agreed to be paid to each MBE for the work or supply.

(2) If the apparent low bidder is unable to achieve the contract goal for MBE participation, the apparent low bidder shall submit, instead of or in conjunction with the Schedule of Participation, a written request for a waiver to include the following:

(a) A detailed statement of the efforts made to select portions of the work proposed to be performed by MBE's in order to increase the likelihood of achieving the stated goal;

(b) A detailed statement of the efforts made to contact and negotiate with MBE's including the names, addresses, dates and telephone numbers of MBE's contacted, and a description of the information provided to MBE's regarding the plans, specifications, and anticipated time schedule for portions of the work to be performed;

(c) As to each MBE that placed a subcontract quotation which the apparent low bidder considers not to be acceptable, a detailed statement of the reasons for this conclusion; and

(d) A list of minority subcontractors found to be unavailable. This should be accompanied by a
Minority Contractor Unavailability Certificate signed by the minority business enterprise or a statement from the apparent low bidder that the minority business refused to give the written certification.

(3) A MBE subcontractor project participation statement signed by both the bidder and each MBE listed in the schedule of participation which shall include:

(a) A Statement of Intent to enter into a contract between the prime Contractor and each subcontractor if a contract is executed between the University and the prime Contractor, or, if the prime contract has been awarded, copies of the subcontract agreement or agreements; and

(b) The amount and type of bonds required of MBE Contractors, if any.

(4) A completed and signed MBE Self-Certification Affidavit for any MBE prime Contractor and for each MBE subcontractor identified in the Schedule For Participation, provided that the bidder or subcontractors are not already certified by the Certification Council or the Department of Transportation under COMAR 21.11.15 or 21.11.16.

(5) A Solicitation Affidavit completed and signed by the prime Contractor stating that, in the solicitation of subcontract quotations, MBE subcontractors were provided not less than the same information and amount of time to respond as were non-MBE subcontractors, and that the solicitation process was conducted in such a manner as to otherwise not place MBE subcontractors at a competitive disadvantage to non-MBE subcontractors.

(6) Any other documentation considered appropriate by the University to ascertain bidder responsibility in connection with the contract MBE participation goal.

10.3.5 The Contractor, by submitting it's bid or offer; consents to provide such documentation as requested by the University pursuant to COMAR 21.11.03.13, and to provide right of entry at any reasonable time for purposes of the State's representatives verifying compliance with the MBE subcontractor requirements.
10.4 RECORDS AND REPORTS

10.4.1 The Contractor shall maintain such records as are necessary to confirm compliance with its minority business enterprise utilization obligations. These records shall indicate the identity of minority and non-minority subcontractors employed on the contract, the type of work performed by each, and the actual dollar value of work, services and procurement achieved by each contractor and subcontractor.

10.4.2 The Contractor shall submit information with his monthly cost breakdown for progress payments which indicates the dollar value of contracts awarded to minority business enterprises as the contract work occurs. This information will be submitted as a supplement to the Cost Breakdown For Progress Payments form. Failure of the Contractor to submit the required supplementary MBE participation information may result in delays in processing progress payments.

10.4.3 All records concerning MBE participation must be retained by the Contractor and will be available for inspection by the University for a period of three years after final completion of the contract.

10.5 ENFORCEMENT

10.5.1 The University is responsible for conducting inspections to confirm compliance with the terms of this section. If the University determines that the contractor or subcontractors are not in compliance with this section, the University will notify the Contractor of those measures which the Contractor must take to restore the Contractor to a state of compliance. If the contractor or subcontractor fails to take corrective action, the University may report the noncompliance to the Board of Public Works for appropriate action.

10.5.2 If the documentary material submitted by the Contractor or subcontractor to determine minority business status contains false, misleading information or other misrepresentations, the matter will be referred to the Attorney General for appropriate action.

10.6 CONTRACTOR ASSISTANCE

10.6.1 Contractors requiring assistance in locating Minority Business Enterprises are encouraged to contact the following offices:

00700-76
Equal Opportunity Section For
State Highway Administration
707 North Calvert Street
Room 409
Baltimore, Maryland 21202
301/333-1504

Contract Compliance Officer
Maryland State Department of General Services
301 W. Preston Street, Room 1201
Baltimore, Maryland 21201
301/225-4276

The State of Maryland Business Enterprise Directory is
available to Contractors at either of the locations
listed above. The Directory contains information about
currently certified Minority Business Enterprises.
SECTION 01010
SUMMARY OF WORK
RESIDENTIAL LIFE
LIGHTING UPGRADE FOR DORMITORIES 1, 2, AND 3

INTENT

Upgrade existing lighting in each dorm room to insure adequate lighting:


2. Provide electrical service by hard wiring each fluorescent fixture into one of three existing receptacles nearest the center of the room. (These receptacles are located on the walls adjacent to the lavatories).

   Note: The top half of the three receptacles is controlled by an existing wall switch located at the entrance to the room. The bottom portion remains hot at all times.

3. Install a new wall switch in each room wired to operate the new fluorescent fixture only.

4. Modify each receptacle along the designated wall to insure that the entire receptacle is hot at all times.

5. Provide and install wire mold to shield all surface mounted installations of electrical wiring.
SECTIOH 01041
PROJECT COORDINATION

1. GENERAL

1.01 Description of Work: Work consists of general coordination and cooperation of various trades and sections of work.

A. Dimensions: Coordinate sizing of various components to assure proper fit and location. Verify dimensions of existing work.

B. Drawings: Various products and systems have been indicated schematically or diagrammatically. Coordinate to determine actuality and to prevent interference of components with other trades.

C. Substitution or Change: Determine and coordinate the effects. Upon approval of substitution or change in the work, accept all ramifications and costs related thereto, and which consequently becomes apparent.

D. Sequence: Coordinate to provide normal progression of the work in a timely manner without delays. Determine long-lead items and the requirements of those items on which each sequence is dependent. Coordinate sequence of work with use of the premises.

E. Individual Inspection: Responsibility of each and every Subcontractor or trade to review documents, surfaces, substrates and areas related to the execution of their work.

F. Schedule work to avoid conditions detrimental to the work occurring during construction.

G. Protection: Prevent damage to completed work.

1.02 Submittals: Supply exact layouts, dimensions or templates and instructions for installation, erection, and any anchorage of products to be installed or incorporated in other work.

1.03 Meetings: Authorized representatives shall attend conferences or meetings when required for the purpose of coordinating or expediting the work.

1.04 Inspection and Acceptance of Job Conditions:

A. Review of Work: Prior to the commencement of work within each section of the specifications, carefully examine previously executed work performed under other sections or by other trades, which might affect execution of work within a specified section.

1. Accuracy: Check work, substrates, bearings, etc., for proper level, alignment and security of attachment.

a. Substrate Tolerances: Not vary more than 1/16-inch above and/or below required plane in any undivided space or any span of 10 feet whichever is least; nor shall there be more than 1/32 inch variation
within any single running foot, unless other tolerances are specified.

2. Surface Conditions: Inspect substrates to see that they are dry, clean, free of oily waxy film, foreign matter, and loose material, firm and stable.

3. Work to be concealed: Obtain assurance that work to be covered, enclosed or embedded has been completed prior to commencement of following work.

4. Deficiencies: Coordinate and have corrected all conditions which might interfere with or prevent satisfactory execution of the indicated work.

B. Acceptance: Commencement of work within a section will indicate acceptance by the Contractor of previously executed surfaces, substrates and areas of work. The commencement indicates that previous work has been inspected and meets the full satisfaction of the Contractor and his willingness to provide guarantee.

1. If problems arise in connection with the proper execution of work of its relation to the product or substrate, then stop work in that area immediately. Contact the manufacturer and supplier, or Architect to see what can be done to rectify the conditions.

1.05 Environmental Conditions:

A. Product Handling and Execution of Work:

1. Do not subject products to environmental conditions to which they may be susceptible or which may adversely effect the work.

2. Do not install or apply products where environmental conditions have adversely affected substrates, or are likely to occur which will affect its curing or eventual performance.

3. Refer to each section of work for requirements of environmental conditions specific to the work.

B. Specific Concerns:

1. Concrete, mortar, cement, plaster, coatings and adhesives: Protect substrates and installed products from frost and freezing.


3. Mill work and cabinet work: Do not subject to excessive humidity and do not allow to become wet.

4. Finish materials: Install under conditions similar to those when the building will be occupied lighting, temperature and humidity. Prevent damage to materials prior to and after installation.

C. Moisture:
   1. Protect work from precipitation (mist, rain, sleet, snow, or hail).
   2. Prevent excessive humidity. Protect against dew, fog and frost.
   3. Do not allow moisture to accumulate or saturate materials.

D. Lighting:
   1. Provide supplemental levels conducive to the accuracy of the work.

E. Combinations of Conditions:
   1. Prevent excessive dampness, condensation, or dryness.
   2. Protect against frost and ice or flash sets due to hot and dry.
   3. Prevent mildew, rust, corrosion, warpage, swelling or delamination.

**End of Section 01041**
1. **GENERAL**

1.01 **Scope of Work:**

A. Include all labor, materials, equipment and services necessary for and incidental to the execution and completion of cutting and patching, as indicated on the drawings and mentioned herein.

B. Execute cutting (including excavating), fitting or patching of work, required to:

1. Make several parts fit properly.
2. Uncover work to provide for installation of ill-timed work.
3. Remove and replace defective work.
4. Remove and replace work not conforming to requirements of Contract Documents.
5. Remove samples of installed work as specified for testing.
6. Install specified work in existing construction.
7. Uncover work to provide for Architect/Engineer's observation of covered work.
8. Remove work to provide for alteration of existing work.

C. **Coordination:**

1. Do not endanger any work by cutting or altering work or any part of it.
2. Do not cut or alter work of another Contractor without written consent of Architect/Engineer.

1.02 **Submittals:**

A. Prior to cutting which affects structural safety of project, or work of another Contractor, submit written notice to Architect/Engineer, requesting consent to proceed with cutting, including:

1. Identification of project.
2. Description of affected work.
4. Affect on other work, on structural integrity of project.

5. Description of proposed work. Designate:
   a. Scope of cutting and patching.
   b. Contractor and trades to execute work.
   c. Products proposed to be used.
   d. Extent of refinishing.

6. Alternatives to cutting and patching.

7. Designation of party responsible for cost of cutting and patching.

B. Prior to cutting and patching done on instruction of Architect/Engineer, submit cost estimate.

C. Should conditions of work, or schedule, indicate change of materials or methods, submit written recommendation to Architect/Engineer, including:
   1. Conditions indicating change.
   2. Recommendations for alternative materials or methods.

D. Submit written notice to Architect/Engineer, designating time work will be uncovered, to provide for observation.

1.03 Payment for Costs:

A. Costs caused by ill-timed or defective work, or work not conforming to Contract Documents, including costs for additional services of Architect/Engineer: Party responsible for ill-timed, rejected or non-conforming work.

B. Work done on instructions of Architect/Engineer, other than defective or non-conforming work: Owner.

2. PRODUCTS

2.01 Materials:

A. For replacement of work removed: Comply with specifications for type of work to be done.

3. EXECUTION

3.01 Preparation:
A. Inspect existing conditions of work, including elements subject to movement or damage during:
   1. Cutting and patching.
   2. Excavating and backfilling.
B. After uncovering work, inspect conditions affecting installation of new products.

3.02 Preparation Prior to Cutting:
A. Provide shoring, bracing and support as required to maintain structural integrity of project.
B. Provide protection for other portions of project.
C. Provide protection from elements.

3.02 Performance:
A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances, finishes.
B. Execute cutting and demolition by methods which will prevent damage to other work, and will provide surfaces to receive installation of repairs and new work.
C. Restore work which has been cut or removed; install new products to provide completed work in accord with requirements of Contract Documents.
D. Refinish entire surfaces as necessary to provide an even finish.
   1. Continuous Surfaces: To nearest intersections.

**End of Section 01045**
SECTION 01060
REGULATORY REQUIREMENTS

1. GENERAL

The general provisions of the contract, including General Conditions and the Supplementary General Conditions, apply to the work specified in this section.

1.01 Scope of Work:

A. Include labor, materials, equipment and services necessary and incidental to the construction of this project in accordance with Regulatory Requirements governing and applicable to its construction.

B. Project has been designed in accordance with the requirements of local building codes, health codes, fire codes, various agencies, and financing programs. Effort has been made to incorporate general and special requirements of these agencies, however, any omission does not relieve the Contractor from the responsibility of informing the Owner of violations known to him of requirements of these agencies before the construction.

C. Construct this project in complete conformance with the requirements of these regulatory agencies. If the Contractor notices any obvious violations of the requirements, or if brought to his attention by an inspector, he shall immediately notify the Owner for corrective action.

1.02 Published requirements of the following regulatory agencies form a part of the specification and Contract Documents, whether or not specifically referenced elsewhere in the specification:

A. The "Building Code" shall mean the in-force code of the place of construction, including all ordinances, safety, health, planning and zoning requirements and related requirements for permits, licenses, fees, and soil and erosion control.


C. Safety: "O.S.H.A.", the Occupational Safety and Health Act of 1970 including Federal Law and local requirement supplemental to and more stringent than O.S.H.A. Each employer, whether he be Contractor, Prime Contractor, or subcontractor shall be separately responsible for all specific safety requirements promulgated by any governmental authority, including, without limitation, the requirements of the Occupational Safety and Health Act of 1970, the Construction Safety Act of 1969, and all standards and regulations which have been or shall be promulgated by parties or agencies which administer such acts. In respect of the requirements of O.S.H.A. each Contractor and subcontractor shall be responsible for the acts of his employees and for appropriate record keeping and reporting.

D. Handicapped: Regulations governing construction of facilities for the handicapped, shall conform to all local jurisdictions.
E. Plumbing: Local Code of place of construction.
1 GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 Project Meetings:

A. Contractor shall hold progress meetings at the site twice monthly and at a schedule and time suitable to Owner. Report progress of work in detail with reference to construction schedules. Each interested subcontractor will have present a competent representative to report the condition of his branch of the work and to receive instructions. Contractor shall take minutes of meetings and type and distribute them to members of the conference and others interested, within three days of the meeting.

B. Contractor shall request all subcontractors to carefully check all drawings and specifications and have representatives present at first called progress meeting. At this progress meeting, procedure for prosecution of the work will be discussed and any detailed requirements of the drawings and specifications which are not understood will be clarified.

1.02 Progress Schedules: Shall be provided at beginning of project and updated monthly until substantial completion. See Section 01310 for schedule requirements.

1.03 Administration of Contract:

A. The contractor shall follow the drawings strictly and execute all work in accordance therewith, and with the kind of quality of materials set forth in the specifications, using the figured dimensions marked in the drawings and not scaled measurements.

B. The specifications and drawings shall be coordinated, so that any work shown on the drawings and not mentioned in the specifications, and vice-versa, shall be executed in the same manner as though mentioned in the specifications and shown in the drawings.

C. The contractor shall furnish and install such work and material as may be proper and suitable preparation, basis, support, or finish for the work which is shown or specified, whether or not the same is specifically mentioned in the specifications or shown on the drawings. The contractor shall be required to make plural and complete work which is shown single or partially indicated to avoid needless repetition, for the sake of brevity, and for reasons of clarity. In all cases the intent and meaning of the drawings and specifications, as defined herein shall be followed. The contractor shall not avail himself of any errors or omissions therein, should any exist, which may be in conflict therewith.

1.04 Project Record Documents:
A. Documents: Maintain at the job site one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, Field Orders, other Contract Modifications, and other approved documents submitted by the Contractor in compliance with various sections of the Specifications.

B. Identification and Maintenance: Each of these Project Documents shall be clearly marked, "Project-Record Copy," maintained in good condition, available at all times for inspection by the Architect, and not used for construction purposes.

C. Records:

1. Mark up the most appropriate Document to show:
   a. Significant changes made during the construction process.
   b. Significant detail not shown in the original Contract Documents.

2. The information given shall include, but shall not be limited to:
   a. The location of underground utilities and appurtenances, referenced to permanent surface improvements.
   b. The location of internal utilities and appurtenances concealed in building structures, referenced to visible and accessible features of the structures.
   c. Any relocation of concealed structural components.
   d. Other changes as directed by the Architect.

3. Keep Project-Record Documents current. Do not permanently conceal any work until the required information has been recorded.

1.05 Administrative Forms:

A. Forms Furnished by the Contractor: The following forms published by the American Institute of Architects (1735 New York Avenue, N.W., Washington, D.C. 20006) shall be used in administration of the contract, shall be furnished by the Contractor in quantities required and copies thereof may be examined by qualified bidders at the Architect’s Office upon request.
Title
Change Order
Application and Certificate for Payment
Certificate of Insurance
Contractor's Affidavit of Payment of Debts and Claims
Contractor's Affidavit of Release of Liens
Consent of Surety Company to Final Payment
Consent of Surety Company to Reduction in Partial Release of Retainage

AIA Document No.
G701
G702 and G703
G705
G706
G706A
G707
G707A

**End of Section 01200**
1 GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 Submissions:

A. Time for making submissions: Submit samples, shop drawings, material lists, certificates, manufacturer’s literature and other required information in accordance with the schedule described in Section 01310 to permit proper consideration and action before any materials or items are fabricated or delivered. The Contractor will be held responsible for any delay in the progress of the work due to his failure to observe the approved schedule. The time for contract completion will not be extended on account of his failure to submit samples and shop drawings promptly in strict accordance with the schedule.

B. Delivery of Submissions to the Architect: Shop drawings and samples may be either handed to the Architect at the site during a progress meeting or delivered to his office prepaid by the Contractor. Shop drawings and samples must be submitted by the General Contractor only. Shop drawings submitted directly to the Architect from a Sub-Contractor will not be reviewed.

C. Submissions for Mechanical and Electrical Work: In connection with the mechanical and electrical work of the project (plumbing, heating, ventilating, air-conditioning, electrical work), submit a complete list of material, manufacturers and other required information, as listed under the respective mechanical and electrical specification selections within 30 days after date of notice to proceed; no consideration will be given to partial lists submitted from time to time.

1.02 Contractor’s Review: Before submitting the shop drawings for the Architect’s review, the Contractor shall review them for:

A. Conformance with the contract drawings and specifications and all other information given.

B. Coordination with all other affected trades.

C. Verify accuracy of all dimensions and coordination with actual field dimensions.
D. Determine that it is acceptable in terms of the means, methods, techniques, sequences and operations of construction, safety precautions and programs incidental thereto.

E. Call to the Architect's attention any shop drawing that varies from what is called for in the contract documents.

F. The Contractor must insure that all submittals required in the contract documents have been submitted to the Architect for review.

1.03 Contractors Approval:

A. All drawings and details, at the time of submission, must bear the Contractor's stamp of approval as evidence that such drawings and details have been reviewed by the Contractor. Any drawings submitted without such stamp of approval or whenever it is evident (despite the stamp) that the drawings have not been reviewed, will be returned to the Contractor for re-submission without further consideration; in such event, it will be deemed that the Contractor has not complied with this requirement and the Contractor shall bear the risk of all delays to the same extent as if no drawings or details at all had been submitted. The submission of shop drawings or re-submission of corrected shop drawings constitutes evidence that the Contractor accepts and is willing to perform the work as shown, in a workmanlike manner, and in accordance with the best standard practice.

B. The Contractor agrees to pay the Architect for the review of any submission that varies from what is called for in the contract documents.

C. Improper Checking and Coordination: The cost of any changes in the work due to improper checking or improper coordination shall be paid for by the Contractor.

1.04 Architect's Review: The Architect will review the shop drawings for:

A. Color.
B. Finish.
C. Design intent.
D. Aesthetics of Architectural details.
E. Technical content of engineering submissions.
F. The Architect will return without review any shop drawings not required in the contract documents.

1.05 Architect’s Approval: Until approval has been given by the Architect, any materials or items fabricated or incorporated in the work are done so at the Contractor’s risk. The Architect’s approval will be only general in nature and shall not be construed as permitting any departure from contract requirements, or as relieving the Contractor of responsibility for any errors concerning details, dimensions, materials, etc. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variation in his letter of transmittal. If acceptable, the Architect may approve any or all such variations, subject to proper adjustment in Contract price. If the Contractor fails to describe such variation, he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such drawings have been approved.

1.06 Substituting for an Approved Material: 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 Architect. Such substitute materials will be approved only if they are in the best interest of the Owner.

1.07 Approved Shop Drawings and Samples at the Site: One of each shop drawing and sample approved and stamped by the Architect shall be maintained in good condition at the project site by the Contractor and for the duration of the Contract.

1.08 Shop Drawings:

A. Definition of the Term “Shop Drawing”: The term “Shop Drawing” shall be considered to include: fabrication, erection and setting drawings; manufacturer’s standard drawings; schedules; descriptive literature, catalogs, brochures; performance and test data, diagrams; and all other descriptive data pertaining to materials, equipment and methods of construction as may be required to show that the equipment or materials and the position thereof conforms to the contract requirements. As used herein, the term “manufactured” applies to standard units usually mass produced and “fabricated” covers items specifically assembled or made from standard materials to meet individual design requirements.

B. Claims for Extra Cost: No claim for extra cost shall be based on work shown on shop drawings.

C. Preparation and Contents of Shop Drawing Submissions: Submit shop drawings accompanied by a Letter of Transmittal, signed by the Contractor. Sepias are required only for drawings too large for office copier (over 8-1/2" x 14"). The sepia shall not be folded or creased and it shall be the same
size as the contract drawings. Unless absolutely necessary, the size shall not exceed 24" x 30". Comments, if required, and all approval stamps, shall be noted on sepia which will be returned to the Contractor. The Contractor shall make additional prints from the sepia, as required, for proper distribution to subcontractors, suppliers, etc. Only prints showing Architect's approval are to be at the job site.

D. Shop drawings shall contain the following information. Any inapplicable data appearing on manufacturer's printed literature shall be marked out.

1. Project title, Architect, Engineer, Owner, Contractor or SubContractor.

2. Date drawn and dates revised.

3. Contractor's certification that shop drawings have been checked by him for compliance with contract requirements.

4. Space for approval stamps.

5. Working dimensions and erection dimensions.

6. Arrangements.

7. Sectional views.

8. Details and methods of fabrication, assembly and erection.

9. Details in connection with contiguous work.

10. Fastenings.

11. Equipment, accessories and trimmings.


13. Protective coatings and factory finishes.


15. Information about who furnishes related work (usually noted "by others").

16. Reference to specification paragraph number, or contract drawing number where item was required or specified.
17. Other pertinent data.

F. Composite Shop Drawings and Field Installation Details: The Contractor shall prepare composite shop drawings and field installation details, when required, to solve tight 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 interferences, etc. The composite shop drawings and field installation detail shall be coordinated in the field by the Contractor and involved subContractors for proper relationship to the work of other trades, based on field conditions, and shall be checked and approved by them before submissions to the Architect for his final approval. The Contractor shall have competent technical personnel readily available for such coordination and checking, as well as for the supervision of the field installation of the work in accordance with the approved shop drawings and field installation details.

G. The Phrase "By Others": Where the phrase "By Others" (or a similar expression) appears on a shop drawing and refers to any of the contract work, it shall be construed to mean "By the Contractor". The Architect’s approval of any drawings containing such phrase shall not be considered permission to delete any work from the Contract.

H. Shop Drawings Marked "No Exception Taken": Shop drawings which require no corrections by the Architect shall be marked "No Exception Taken".

I. Shop Drawings Marked "Make Corrections Noted": Shop drawings which require only a minor amount of correction will be marked "Make Corrections Noted". This mark shall mean that checking is complete and all corrections are obvious without ambiguity. Fabrifications will be allowed on work "Make Corrections Noted", provided such action will expedite construction and noted corrections are adhered to. If fabrication is not made strictly in accordance with the corrections noted, the item shall be rejected in the field and the Contractor will be required to replace such work in accordance with the corrected shop drawings.

J. Shop Drawings Marked "Revise and Resubmit": When shop drawings are marked "Revise and Resubmit", details of items noted by the Architect shall be further clarified before approval can be given and noted items must be fabricated until corrected and approved. Unmarked items may be fabricated unless otherwise directed.

K. Shop Drawings Marked "Rejected": When shop drawings are contrary to contract requirements or too many corrections are required, they shall be
marked "Rejected". No work shall be fabricated under this mark. The Architect shall list his reason for rejection on the shop drawings or in the transmittal letter accompanying their return. The drawings must be corrected and resubmitted for approval.

L. Return of Shop Drawings to Contractor Unreviewed: The Architect may return shop drawings to the Contractor unreviewed for any of the following reasons, in which case, the submission will not be considered official:

1. Submitted in violation of specified procedures.

2. Inadequately reviewed by Contractor.

3. Inaccurate and substantial error.

M. Architect's Retention of Shop Drawings for Future Review: Where partial submissions cannot be reviewed until the complete submission has been received, or where correlation is required between material submitted and material not yet submitted, that the submission will not be considered official until it is complete in every respect.

N. Resubmission of Corrected Shop Drawings: No changes shall be made by the Contractor to resubmit shop drawings in excess of those corrections noted by the Architect, unless accompanied by a letter explaining the additional changes.

1.09 Samples:

A. Submission of Samples: Except where otherwise specified, submit samples in duplicate accompanied by a letter of transmittal signed by the Contractor. Label each sample with the project name, project number, Contractor's name, trade name or other identification related to letter of transmittal. Any samples received without a transmittal will be considered "unclaimed goods" and held for a limited time only. The letter should contain the following:

1. Contractor's name.

2. Project name and number.

3. List of samples being submitted.

4. Specification section under which the sample is specified.

5. Number of standard (ASTM, USA, Commercial Standard Fed. Spec.,
etc.). if any with which sample applies.

6. Manufacturer’s name or source of supply.

7. Trade name.

8. Catalog number.

9. Other pertinent information.

10. Any deviation from Contract requirements.

11. Contractor’s certification that he has checked all samples for compliance with Contract requirements and availability of material represented thereby.

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

C. Rejection of Work Not Conforming to Approved Samples: Samples submitted shall clearly show the full range of quality, color and texture which will be evident in finished work. Materials which are not equal to approved samples shall not be used on this project and shall be discarded immediately upon their discovery. The approval or acceptance of samples will not preclude the rejection of any material not complying with contract requirements which is discovered prior to end of guarantee period.

1.10 Manufacturer’s Certificates:

A. Where indicated in the Specifications submit manufacturer’s and Contractor’s affidavit certifying that the material furnished for this project complies with Contract requirements.
SECTION 01310
CONSTRUCTION SCHEDULES

1 GENERAL

1.01 Description:
   A. This section covers provisions for construction schedules.

1.02 Form of Schedules:
   A. Prepare in form of "Critical Path Method" or similar network type chart.
      1. Provide separate horizontal breakdown of each trade or operation.
      2. Order: Chronological order of beginning of each item of work.
      3. Identify each item of work:
         a. By major specification section number.
         b. By logically grouped activities.
      4. Horizontal time scale: Identify first work day of each week.
      5. Scale and spacing: To allow space for updating.

1.03 Content of Schedules:
   A. Provide complete sequence of construction by activity.
   B. Shop drawings, product data and samples, submittal schedule.
   C. Decision dates for selection of finishes.
   D. Product procurement and delivery dates.
   E. Provide subschedules to define critical portions of work.

1.04 Updating:
   A. Show all changes since previous submittal of updated schedule.
   B. Indicate progress of each activity, show completion dates.
   C. Provide narrative report, including:
      1. Discussion of problem areas, including current and anticipated delay factors and their impact.
      2. Corrective action taken, or proposed, and its effect.
3. Description of revisions.

1.05 Submittals:

A. Submit initial schedule with in 20 days after notice to proceed.

B. Submit updated schedules (approximately every 2 months) accurately depicting progress to first day of each month.

C. Distribute reviewed schedules to all parties.
SECTION 01400
QUALITY CONTROL

1 GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 Scope:

Work included: Perform all work necessary and required for the construction of the project as indicated. Such work includes but is not limited to the following.

1. Reference specifications and standards.
2. Inspections and tests.

1.02 Reference Specifications or Standards:

A. Various standards and specifications are incorporated in the technical sections of these specifications by reference. In all such instances the reference shall mean the latest edition, including amendment or revision in effect as of the date of these specifications, unless a specific issue is identified otherwise.

B. In the event that referenced specifications or standards contain general requirements in conflict with the general or supplementary conditions, or the scope of work of individual sections of these specifications, the provisions of these specifications shall govern.

C. A list of organizations publishing specifications or standards normally referenced in technical sections of these specifications, together with the official abbreviation therefore, follows:

<table>
<thead>
<tr>
<th>Abbrev.*</th>
<th>Organization</th>
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<tr>
<td>AASHO</td>
<td>American Association of State Highway Officials</td>
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<tr>
<td>ACI</td>
<td>American Concrete Institute</td>
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<td>AIA</td>
<td>American Institute of Architects</td>
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<tr>
<td>AISC</td>
<td>American Institute of Steel Construction</td>
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<td>AISI</td>
<td>American Iron and Steel Institute</td>
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<tr>
<td>ANSI</td>
<td>American National Standards Institute, Inc. (formerly USASI United States of America Standards Institute)</td>
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<tr>
<td>APA</td>
<td>American Plywood Association</td>
</tr>
<tr>
<td>ASHARE</td>
<td>American Society of Heating, Refrigerating and Air Conditioning Engineers</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
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<td>AWPA</td>
<td>American Wood-Preservers' Association</td>
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<td>AWI</td>
<td>Architectural Woodwork Institute</td>
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<td>AWS</td>
<td>American Welding Society</td>
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<tr>
<td>CS</td>
<td>Commercial Standard, U.S. Department of Commerce</td>
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1.03 Inspections and tests:

A. The Contractor shall furnish to the Architect, at no additional cost, shop and mill test structural steel test and concrete testing. The Contractor shall inform the Architect of progress of the work and shall give the Architect ample advance notice of appropriate times for inspections and tests. Specified tests will be by the Contractor and approved testing agency.

B. When local codes or laws require approval and/or inspection of the drawings or equipment before installation or operation, it shall be that Vendor's responsibility to obtain such approval and to submit one (1) signed original and three (3) copies of the approval for the purchaser's records.

C. Witnessed performance tests are required only when the specifications or data sheets specifically states this requirement. The Vendor shall notify the Architect ten (10) days in advance of the date the equipment will be ready for final inspection or for performance tests, when required, so that appropriate representatives will be present.

D. The Owner has the right to inspect any material or equipment at any stage of development or fabrication. Such inspection will not release the Vendor from any responsibility or liability with respect to such material or equipment.

E. The Contractor will retain and pay an independent testing laboratory to perform the following (continuous) inspections and testing, engineering, and associated services.

1. Concrete: design all mixes to contract requirements and test same.
   a. Inspect forms and reinforcement.
   b. Inspect placement.
c. Instruct and witness Contractor's slump tests and cylinder samples.

d. Perform twenty-eight (28) day tests on specimen cylinders.

c. See Section Concrete for additional work.

2. Structural Steel: Including Structural Steel, Joists, Miscellaneous Metal and Metal Decking.

a. Inspect shop welds, fabrication, priming, and inspect project site erection, bolting, welding, and touch-up of all structural steel, steel joists, and metal decking by an independent certified inspection agency in the state in which the project will be built.

b. See Section - Structural Steel - for additional work.

3. Reports: Prepare and distribute inspection and test reports to the Architect and the Structural Engineer 1 copy each.

4. Miscellaneous: Perform any additional inspections or tests required by the legal authorities having jurisdiction or required by specifications. Cost all by Contractor.

F. When the Contractor's work will require inspection or test, the Contractor shall notify the Architect twenty-four (24) hours in advance of such required tests or inspections. The Contractor shall cooperate with the testing laboratory's representatives by giving ample notice of the time, location, and extent of work to be inspected or tested, by performing concrete slump tests, preparing concrete and other samples as instructed, and by providing necessary facilities at the project site or in the shop for the testing agency.

G. At least twenty-four hours shall be allowed for the Engineer's observation prior to any test or concrete placement. The inspection will be made after notification that all items have been installed for the test or preparatory for concrete placement. Should the inspection reveal that corrective measures are required or that the work is not complete, an additional twenty-four hours will be allowed to complete the inspection after all work has been corrected or completed.

H. The Engineer shall be notified at least twenty-four hours in advance of backfilling or encasing of any underground utility in order that an inspection may be made of the installation. Failure to provide such notification may require reopening of the trench, at the Contractor's expense.

1.04 Guarantees:

A. Unless otherwise provided in the specifications, the Contractor guarantees all work to be in accordance with contract requirements and free from defective or inferior materials, equipment, and workmanship for two (2)
years after the date of substantial completion.

B. If, within any guarantee period, the Owner finds that guaranteed work needs to be repaired or changed because of the use of materials, equipment, or workmanship which, in his opinion, are inferior, defective, or not in accordance with the terms of the contract, he will so inform the Contractor in writing and the Contractor shall promptly and without additional expense to the Owner:

1. Place in a satisfactory condition all of such guaranteed work.

2. Satisfactorily correct all damages to equipment, the site, the building or contents thereof, which is the result of such unsatisfactory guaranteed work; and

3. Satisfactorily correct any work, materials, and equipment that are disturbed in fulfilling the guarantee, including any disturbed work, materials, and equipment that may have been guaranteed under another contract.

C. Any special guarantees that may be required under the contract shall be subject to the stipulations set forth herein, insofar as they do not conflict with the provisions of such special guarantees.

D. The Contractor shall obtain each transferable guarantee of equipment, materials or installation thereof which is furnished by any manufacturer, supplier or installer. In addition, the Contractor shall obtain and furnish to the Owner all information which is required in order to make any such guarantee legally binding and effective, and shall submit both the information and the guarantee to the Owner in sufficient time to permit the Owner to meet any time limit requirements specified in the guarantee or, if no time limit is specified, prior to completion and acceptance of all work under this contract.

**End of Section 01400**
1. GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 Scope:

A. The work under this Contract includes all necessary temporary items required in good safe construction practice and administration of the Project. Any or all of the items may be required in conjunction with Work of permanent nature described in any and all other Sections of the Specifications.

B. All temporary Work except as specifically stated shall be removed by time of final acceptance of the Project.

1.02 Laying Out of Work:

A. Since the Scope of the Work includes the installation of utility lines where points of connection are not previously established and grading, the Contractor shall employ a competent instrument man to lay out all lines and levels for all the Work.

B. Batter boards of suitable materials substantially constructed shall be erected at all corners of the building and interim points as necessary.

C. Stakes for checking rough and finished grade shall be installed at required intervals throughout the entire area to be graded. Each stake shall be marked to indicate design finished grade as shown on the drawings. These stakes shall be maintained until the Architect has approved the finished grading.

D. Replacement of any of the above layout markers shall be made by the Contractor until the times as stated above.

1.03 Protection of Adjacent Facilities and Property:

A. The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the Owner property and public from injury or loss arising in connection with this Contract. Since the theatre will remain operational during construction, the contractor must take full precautions to protect both public and staff personnel, and as best as possible to maintain minimum interference with theatre operations. He shall make good any such damage, injury or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. He shall adequately protect adjacent property as provided by law and the Contract Documents.

B. Box all trees along the way of access, also all trees surrounding the building which are liable to injury by the moving, storing and working up
TEMPORARY WORK & CONSTRUCTION PLANS

of materials. Use no permanent tree for attachment of any ropes or derricks. Replace and put in good condition every public way and private way, catch basis, conduit, trees, fence or things injured in carrying out this Contract, unless the same shall be permanently done away with by order of the Architect, or owner.

C. The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public and shall post danger signs warning against the hazards created by such features of construction as protruding nails, wall holes, elevator hatchways, scaffolding, window openings, stairways and falling materials.

D. In any emergency affecting the safety of life, or of the work, or of the adjoining property, the Contractor, without special instruction or authorization is hereby permitted to act, at his discretion, to prevent such threatened loss or injury. Any compensation claimed by the Contractor on account of emergency work shall be determined by the Architect.

1.04 Safety Precautions:

Provide all safety precaution work to protect the general public from injury such as temporary guard rails, temporary night lighting and warning signs to define areas of danger.

1.05 Protection of Work, Storage and Transportation of Materials:

A. Sheds and Platforms: Waterproof shelter must be provided for the storage of cement and all other materials subject to spoilage. Lumber must be stored off the ground and kept dry. Platforms must be provided for the storage of cut stone and other materials likely to be stained if improperly stored. Owner will provide limited storage facilities.

B. Transportation: All materials shall be so crated, packed, packaged, blocked and otherwise protected during transport and handling to prevent staining, chipping or any other damage. This shall include the provisions of any necessary lifting devices or machines, and the skilled personnel to operate such machines.

C. Protecting Work in Place: Provide all necessary protection of completed work to prevent any and all damage.

1.08 Temporary Office and Privy:

A. The Contractor shall provide an office suitable for the use of persons required to inspect the work. He shall provide it with telephone, heat and air conditioning and keep it clean.

B. The Contractor will provide and maintain a suitable portable chemical toilet service.

1.07 Temporary Door and Window Bucks: Provide all necessary temporary bucks as required for efficient construction of the masonry, plastering and other trades.
1.08 Temporary Door and Window Closures: Provide as necessary to protect the mansion from theft and damage.

1.09 Provision for Temporary Heat: Provide heating units, fuel, tarpaulins, and other items to provide for temperatures to install the work specified in the contract. Temporary heat shall be included in the base bid.

1.10 Temporary Water and Electric Service:

A. It is the Contractor's responsibility to provide water and electricity as he may require during construction at the job site.

B. Temporary water and electric is available on site. Contractor shall coordinate with the University for temporary service. Payment for the temporary water and electric shall be billed at $250.00 per month, payable to the University of Maryland Baltimore County. Contractor may elect to meter consumption for which billing will be assessed at .03 cents per KW of electric used and .54 cents per gallon of water used.

1.11 Clearing and Cleaning Up: The Contractor shall at all times keep the premises free from accumulation of waste materials and rubbish. At the completion of the work he shall remove all rubbish from and about the building and remove from and about building all his tools, scaffolding and surplus materials and shall leave the work completely clean.

1.12 Fence: The Contractor shall provide temporary fence of plywood or chain link wire seven feet high. Obtain the Architect's and owner's approval of the location. Fence may be constructed, with approval, of used materials but must be in good condition and so maintained. Gates shall be at the option of the Contractor but must be securely locked against entry when work is not in progress.

**End of Section 01500**
1. GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 General:

A. At the completion of the work, before a final payment will be certified, the Contractor shall transmit to the Owner, the following materials:

1. A complete file of shop drawings. A complete set of "As-Built" Drawings. The Bond for the Roofing as specified. The written Guarantee for the wood doors as specified. A written "Release of Liens" from all subcontractors and material vendors. Any other items required by the specifications and general conditions.

B. Partial and final occupancy permits must be obtained by Contractor.

1.02 Preparation of Punch List and Final Inspection:

A. The Contractor shall notify the Architect in writing when the work is substantially complete and ready for inspection.

B. The Contractor, the Architect and the University representative shall go through the entire project and list those items that are incomplete or for any reason unsatisfactory.

C. The Contractor shall correct the items listed in a diligent and timely manner and then notify the Architect that the work is ready for Final Inspection.

D. In the event that the Owner wishes to occupy a portion of the work prior to the completion of the whole, the Owner will notify the Contractor who will set up an inspection of that portion so that it can be completed and turned over for use.

1.03 Project Clean-Up:

A. General:

1. Work Included: The work includes but is not limited to the following items:
a. Sweeping, brushing, and dust control.

b. Washing.

c. Waxing and polishing.

d. Debris removal.

e. Removal of excess material, tools, equipment, and scaffolding.

f. Cleaning all installed work. Refer to Sections of Specifications where specific additional requirements may be stated.

2. By Others: The following items of work will be performed by others and are not included in the Contract:

a. Recleaning any portion of the project accepted and occupied by the Owner prior to final total acceptance.

1.04 Requirements of Regulatory Agencies: All work performed shall comply with health, safety, and fire protection codes and/or applicable regulations established by the agencies having jurisdiction.

2. Execution:

2.01 Final Clean-up Time: Immediately prior to the Contractor’s request for final inspection of the project or any portion thereof, final clean-up shall be performed.

2.02 Quality of Clean-up: In addition to the normal "broom clean" requirements, the exposed surfaces of the following materials shall be cleaned as listed herein:

A. Glass: Remove excess putty and paint. Wash and polish.

B. Painted Surfaces: Remove marks, stains, fingerprints, and dirt.

C. Hardware: Clean and polish.

D. Vinyl Floor Tile: Remove paper cover, clean, and wax.

E. Other Surfaces: Remove all blemishes, leave clean, uniform, and dust free.

F. Premises and Site: Remove all trash, debris, and surplus excavation dirt. No items shall be left or discarded elsewhere on the site, or on any other
Owner’s sites. Items that will be discarded shall be removed to authorized public dumps. Leave premises “washed clean”. Extra building materials, supplies, etc., shall be provided for Owner’s use, as specified in the separate sections of the specifications.

G. Exposed Slabs: Wash, scrape, and scrub, using a detergent as necessary to remove bond breaker, dirt, and discolorations.

H. Paving: Remove mud, dirt, and trash and hose down as required.

I. Aluminum: Remove all temporary protective covering and clean as directed.

J. Stainless Steel and Other Metal Surfaces: Remove protective covering. Clean and polish as directed.

L. General: Remove paper labels from glass, fixtures, and equipment only after respective items have been inspected, verified and approved to assure that each complies with requirements of specifications and drawings. Label and plates that are permanently attached to equipment shall not be removed. Remove paint and clean all permanent labels so that they are legible.

2.03 Broken Glass, Other Damaged Material:

A. To be replaced as necessary prior to final inspection.

3. Acceptance:

3.01 The Acceptance of the Work will be given after the Owner has made sufficient tests and inspections to determine the compliance of the work with the drawings, specifications and any written agreements between the Contractor and Owner. Tests and inspections will be made within one (1) month from the date work is complete and ready for use. If tests and/or inspections show the work not to be as represented or contracted for, the Owner may refuse to accept it, and the Contractor shall be so advised and given a reasonable time to make the necessary corrections. All corrections shall be made at the Contractor’s expense.

3.02 End-of-Guarantee Inspection:

A. The Contractor shall arrange to meet with the Owner within 30 days prior to the specified end of the guarantee period for the purpose of assembling a list of items which require correction under specified guarantees. Should the Contractor be unable or fail to schedule a meeting prior to this time, the Guarantee shall be automatically extended until such time as the meeting takes place and the Contractor shall be fully responsible for correcting such deficiencies as if they occurred under the original guarantee period.
3.03 "As Built" Drawings:

A. As the work progresses, the Contractor shall record in red ink on a set of black and white reproducible prints of the Contract Drawings the "as installed" locations, sizes, elevations, identification, etc., of all construction, services, utilities, equipment, etc., wherever and however such information differs from, or is missing from, the Contract Drawings. The prints are to be kept in good condition at all times.

B. All dimensions and elevations shall relate to datum references acceptable to the Owner.

C. All recorded information shall be certified by signature on the prints by the Contractor.

D. Where such information cannot be clearly shown, it shall be recorded on reproducible large scale drawings.

3.04 Prior Use or Occupancy:

A. The Owner reserves the right to use or occupy the building or any part thereof, or to use equipment installed under this Contract, prior to final acceptance of the work or any part thereof.

B. The Owner reserves the right to assume Beneficial Occupancy of the facility for use by tenants. The Contractor shall provide the following items at the time of occupancy. It should be noted that this is not to eliminate requirements specified in other sections of these specifications; however, this is to draw the Contractor’s attention to items that must be complete before the Owner can assume occupancy.

1. Punch List completed and concurred to by Contractor.

2. Inspection of fire protection system sprinkler system by the State and Local Fire Marshal’s office and Insurance Rating Bureau plus correction of any deficiencies.

3. Electrical systems fully operating, inspection and acceptance by the appropriate authorities.

4. Instruction of Owner’s operating personnel by Contractor must be complete and maintenance manuals must be available at this time.

5. The Contractor is responsible to notify the various utilities that he is no longer responsible for cost of same. The Contractor is responsible
for any cost until such time this is done.

6. The Contractor is responsible for securing any partial or full occupancy permits should they be required by local authorities.

7. Project must be clean to the Owner’s satisfaction.

8. All labeling shall be complete as required in the specifications.

9. All safety devices shall be fully operational.

10. The Contractor shall at no time cut off fire protection and safety systems without 24-hour notification. Other systems may be coordinated with the individual to whom the building is assigned.
1. GENERAL

The general provisions of the Contract including General Conditions apply to the work specified in this section.

1.01 General:

A. General Notes: As a condition of the contract, General Contractor shall prepare before project is closed out, three (3) copies to Owner, through Architect. Booklet shall be as specified herein. Booklet must meet approval of Architect and Engineer, and will not be considered as fulfilling this condition of Contract until so approved.

B. Make-Up of Booklet: Booklet shall be bound in three-ring loose-leaf binder similar to "National" No. 3881, with following title lettered on front: "Record and Information Booklet". No sheets larger than 8-1/2" x 11" shall be used, except sheets that may be neatly folded to 8-1/2" x 11" and used as a pull-out.

C. Contents of Booklet: Booklet shall be prepared in accordance with the following outline:

1. Cover Page
2. Table of Contents
3. Contract Documents
4. Owner/Architect/Engineer/General Contractor Data (Include name, address, telephone, contact and emergency telephone numbers where appropriate.)
5. General Project Data (this section includes all contract dates and permit dates and numbers).
6. Subcontractor and Supplier List (include specification section w/description and name, address, telephone and contact for the respective subcontractor/supplier.)
7. Miscellaneous Product Data (this section includes all submittal data with respect to model, color selection, etc. and the responsible subcontractor/supplier), with each item being sub-tabbed.
8. Guarantee/Warranty/Certification (this section includes General Contractor One-Year Warranty Letter and any warranties/guarantees/certification required by the specifications for a given subcontractor or product, with each item being sub-tabbed.)

D. Prepare the Mechanical and Electrical as-built drawings and Operation and Maintenance Manuals in accordance with the Mechanical and Electrical specification sections.

**End of Section 01720**
SECTION 01741
CONTRACTOR WARRANTY FORM

PROJECT: 

LOCATION: 

OWNER: 

We ____________________________
(Company Name)
Contractor for the above referenced project, does hereby warrant that all labor and materials furnished and work performed are in accordance with the Contract Documents and authorized modifications thereto, and will be free from defects due to defective materials or workmanship for a period of two years from Date of Substantial Completion. This warranty commences on ___________________ (Date of Substantial Completion) and expires on ___________________ (Two Years from Commencement Date)

Should any defect develop during the warranty period due to improper materials, workmanship or arrangement, the same, including adjacent work displaced, shall be made good by the undersigned at no expense to the Owner.

The Owner will give Contractor written notice of defective work. Should Contractor fail to correct defective work within 60 days after receiving written notice, the Owner may, at his option, correct defects and charge Contractor costs for such correction. Contractor agrees to pay such charges upon demand.

Nothing in the above shall be deemed to apply to work which has been abused or neglected by the Owner.

FOR: ____________________________

BY: ____________________________

TITLE: ____________________________

DATE: ____________________________
SECTION 01742
SUBCONTRACTOR WARRANTY FORM

PROJECT:
LOCATION:
OWNER:
GENERAL CONTRACTOR:

We Subcontractor for , as described in Specification Section(s) (List Trade), do hereby warrant (List Appropriate Sections of Specifications) that all labor and materials furnished and work performed in conjunction with the above-referenced project are in accord with the Contract Documents and authorized modifications thereto, and will be free from defects due to defective materials or workmanship for a period of ___ year(s) from the Date of Substantial Completion. This warranty commences on (Date of Substantial Completion) and expires on (Expiration Date).

Should any defect develop during the warranty period due to improper materials, workmanship or arrangement, the same, including adjacent work disturbed shall be made good by the undersigned at no expense to the Owner.

The Owner will give Subcontractor written notice of defective work. Should Subcontractor fail to correct defective work within 60 days after receiving written notice, the Owner may, at his option, correct defects and charge Subcontractor costs for such correction. Subcontractor agrees to pay such charges upon demand.

Nothing in the above shall be deemed to apply to work which has been abused or neglected by the Owner.

FOR: ________________________________ FOR: ________________________________
(General Contractor) (Company Name)

BY: ________________________________ BY: ________________________________

TITLE: ______________________________ TITLE: ______________________________

DATE: ______________________________ DATE: ______________________________
SECTION 02070
SELECTIVE DEMOLITION

1 GENERAL:

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

1.01 DESCRIPTION OF WORK:

A. Extent of selective demolition work is indicated on drawings.

B. Types of Selective Demolition Work: Demolition requires the selective removal and subsequent offsite disposal of the following:

C. Portions of building structure indicated on drawings and as required to accommodate new construction.

D. Removal and protection of existing fixtures and equipment items indicated "salvage". These items will be retained for Owner's use and relocated elsewhere in the for Owner's use as the Owner may direct, if not otherwise indicated.

E. Coordinate, cooperate with and note that portions of this demolition work will be accomplished by the Owner under separate contract. This will include all refrigeration equipment.

1.02 REMOVAL WORK SPECIFIED ELSEWHERE:

A. Cutting non-structural concrete floors and masonry walls for underground piping and ducts, and for above grade piping, ducts, and conduit is included with the work of the respective mechanical and electrical Divisions 15 and 16 specification sections.

B. Cutting holes in roof deck and complete installation of skylights and new rooftop equipment is specified in Division-15 sections.

1.03 RELATED WORK SPECIFIED ELSEWHERE:

Remodeling construction work and patching is included within the respective sections of specifications, including removal of materials for re-use and incorporated into remodeling or new construction.

1.04 Relocation of pipes, conduits, ducts, other mechanical and electrical work are specified by respective trades.
1.05 SUBMITTALS:

A. Schedule: Submit schedule indicating proposed methods and sequence of operations for selective demolition work to Owner's Representative for review prior to commencement of work. Include coordination for shut-off, capping, and continuation of utility services as required, together with details for dust and noise control protection.

B. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.

C. Coordinate with Owner's continuing occupation of portions of existing building, with Owner's partial occupancy of completed new addition, and with Owner's reduced usage during summer months.

D. Schedule, coordinate and cooperate with Owner's separate Contractors for removal, salvage and/or demolition work.

1.06 JOB CONDITIONS:

A. Occupancy: Owner will be continuously occupying areas of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities which will severely impact normal operations.

B. Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.

C. Conditions existing at time of commencement of contract will be maintained by Owner insofar as practicable. However, variations within structure may occur by Owner's removal and salvage operations prior to start of selective demolition work.

D. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.

E. Storage or sale of removed items on site will not be permitted.

F. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective demolition work.

G. Provide protective measures as required to provide free and safe passage
of Owner's personnel and general public to and from occupied portions of building.

H. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished, and adjacent facilities or work to remain.

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

J. Protect floors with suitable coverings when necessary.

K. Construct safe temporary insulated solid dust proof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dust proof doors and security locks if required.

L. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces, and installation of new construction to insure that no water leakage or damage occurs to structure or interior areas of existing building.

M. Remove protections at completion of work.

N. Damages: Promptly repair damages caused to adjacent facilities by demolition at no cost to Owner.

O. Traffic: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.

P. Do not close, block or otherwise obstruct streets, walks, or other occupied or used facilities without written permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

Q. Explosives: Use of explosives will not be permitted.

R. Utility Services: Maintain existing utilities indicated to remain, keep in service, and protect against damage during demolition operations.

S. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.
T. Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.

U. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.

V. Should the Contractor discover the existence of any Asbestos materials, the Contractor shall submit a letter to the Owner requesting complete removal of the asbestos material prior to any commencement of his work. The Contractor shall assume full responsibility for the safety of the building occupants, workers and general public in the event he accepts the building and commences demolition operations.

2 PRODUCTS (Not Applicable).

3 EXECUTION

3.01 INSPECTION:

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

B. Asbestos Inspection: The areas in which work will be performed will be inspected by a qualified Asbestos Removal Inspection Agency prior to beginning any demolition work. Demolition shall proceed only when Inspection Agency certifies in writing to the Owner that the area or areas undergoing demolition are free of any asbestos and the Contractor accepts and commences demolition operations.

3.02 PREPARATION:

A. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement or collapse of structures to be demolished and adjacent facilities to remain.

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

C. Cover and protect furniture, equipment and fixtures to remain from soiling
or damage when demolition work is performed in rooms or areas which such items have not been removed.

D. Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.

E. Where selective demolition occurs immediately adjacent to occupied portions of the building, construct dust-proof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partition cavity with sound-deadening insulation.

F. Provide weatherproof closures for exterior openings resulting from demolition work.

G. Locate, identify, stub off and disconnect utility services that are not indicated to remain.

H. Provide by-pass connections as necessary to maintain continuity of service to occupied areas of building. Provide minimum of 72 hours advance notice to Owner if shut-down of service is necessary during change-over.

3.03 DEMOLITION:

A. Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

B. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.

C. Locate demolition equipment throughout structure and promptly remove debris to avoid imposing excessive loads on supporting walls, floors or framing.

D. Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.

E. Demolish foundation walls to a depth of not less than 12" below existing ground surface. Demolish and remove below-grade wood or metal construction. Break up below-grade concrete slabs.

F. For interior slabs on grade, use removal methods that will not crack or structurally disturb adjacent slabs or partitions. Use power saw where
possible.

G. Completely fill below-grade areas and voids resulting from demolition work. Provide fill consisting of approved earth, gravel or sand, free of trash and debris, stones over 2" diameter, roots or other organic matter.

H. If anticipated mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner’s Representative in written, accurate detail. Pending receipt of directive from Owner’s Representative rearrange selective demolition schedule as necessary to continue overall job progress without delay.

3.04 DISPOSAL OF DEMOLISHED MATERIALS:

A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site.

B. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.

C. Burning of removed materials is not permitted on project site.

3.0 CLEAN-UP AND REPAIR

A. Upon completion of demolition work, remove tools, equipment and demolished materials from site. Remove protections and leave interior areas clean.

B. Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

**End of Section 02070**
DIVISION 16 - ELECTRICAL

Section 16000 - BASIC REQUIREMENTS

1.0 SCOPE

1.1 Provide all labor, materials, equipment, supervision and services necessary for and incidental to the complete installation of all electrical work and related systems as shown on the drawings, specified herein, or required to deliver to the Owner a complete installation, ready for continuous and satisfactory operation.

1.2 All items, systems, etc. necessary or required to make the electrical installation complete and operable shall be understood as part of the work.

1.3 Any questions as to the scope of the electrical work shall be submitted to the Engineer for resolution prior to bid and/or installation.

1.4 Provide all necessary temporary wiring, lighting and construction power as required by the construction of all work.

1.5 Materials, workmanship and installation details not covered in this Division of the specifications, but required for the installation of the electrical systems shall be in accordance with applicable Divisions of the specifications.

2.0 GENERAL

2.1 Permits, Inspections and Certificates

2.1 Obtain and pay for all permits, inspections and certificates. Give all necessary notices, file all necessary plans, prepare all necessary documents, and obtain all necessary approvals of all governmental departments having jurisdiction.

2.2 Codes, Standards and References

2.1 Codes: The electrical work covered under the specifications and drawings shall be performed in strict accordance with:

2 Appropriate codes and standards of the National Fire Protection Association (N.F.P.A.) (latest editions).


5 Middle Department Inspection Agency (MDIA).

2 Standards: The work covered under the specifications and drawings shall be performed using the following references as minimum standards for construction and testing:

1 American National Standard Institute (ANSI)

2 National Electrical Manufacturer's Association (NEMA)

3 Underwriter's Laboratories (UL)

4 The Occupational Safety and Health Act (OSHA)

3 References: Materials, equipment, installation and procedures shall be in accordance with the applicable references:

1 ANSI American National Standards Institute

2 ASTM American Society for Testing Materials

3 CS Commercial Standards

4 Fed Federal Specifications

5 IEEE Institute of Electrical and Electronic Engineers

6 IES Illuminating Engineering Society

7 ICEA Insulated Cable Engineers Association

8 EEI Edison Electric Institute

9 NEMA National Electrical Manufacturer's Association

3 Accessibility

1 Conduit and circuiting shall be installed as indicated unless prior approval is obtained for charges.

2 Outlet and junction boxes shall be accessible. Equipment requiring access for service and operation (switches, etc.) shall be readily accessible as defined by N.E.C.
.4 Equipment Connections

.1 Verify exact electrical service requirements of each piece of equipment receiving electrical connections. Provide proper service to each. Include all items required by the N.E.C. for the proper connection of each piece of equipment.

.5 Equipment, Listing and Labelling

.1 All equipment and materials shall be new, the best of these respective kinds, and suitable for the conditions and duties imposed on them. Materials and equipment shall be listed and labeled by Underwriters' Laboratories, Inc. (U.L.) or other nationally recognized testing laboratory, inspection agency, or approved organization such as ETL, MET or FM.

.6 Drawings, Contract Documents and References

.1 The Contract Drawings are diagrammatic and indicate the general arrangement of systems and work. Do not scale the drawings. Consult and review all contract drawings and details for exact locations of structure and equipment; where same are not definitely located, obtain this information from the Engineer.

.2 The complete set of Architectural, Structural, Civil, Mechanical, and Electrical drawings and specifications apply to this work. The Contractor shall familiarize himself with all other related documents.

.3 The drawings and specifications shall be followed in layout of work.

.4 All dimensional, Architectural, and Structural information is subject to the Architectural and Structural drawings.

.5 Should a bidder find discrepancies in or omissions from the drawings or specifications, or should he be in doubt in regard to their intent, he shall notify the Engineering before submitting his bid proposal. The Engineer shall then send written instructions to all bidders. Oral instructions shall not be binding to either the Engineer or the Owner. If this Contractor fails to comply with this requirement, he shall accept the Engineer's interpretation regarding the intent of the Contract Documents.

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.7 Submittals, Review and Acceptance

.1 Within thirty (30) calendar days after the award of contract, all complete Shop Drawings and material lists shall be submitted for the review by the Engineer. Equipment and materials for which Shop Drawings are not submitted within the thirty (30) days shall be provided as specified. Other manufacturers and products will not be allowed. No work shall be fabricated or ordered until approval has been given.

.2 Complete lists of materials and equipment shall be submitted. Full description catalogue or other data shall be submitted.

.3 Shop Drawings and material lists shall be submitted for, but not limited to the following:

Conduit
Wire
Boxes, Fittings, and Wire Troughs
Cabinets
Wiring Devices
Panelboards
Safety Switches
Low Voltage Fuses
Lighting Fixtures and Components
Motor Starters
As elsewhere indicated on the drawings or in the specifications.

.4 Complete Shop Drawings showing dimensions, materials, arrangements, and other pertinent data shall be submitted for all equipment.

.5 Submittals shall include but not be limited to the following information: Size, type, catalog numbers, functional characteristics, compliance with standards, required service access which shall be suitable for intended location and use, electrical service connections and requirements, and deviations from Contract Document requirements. Data of a general nature will not be accepted.

.6 Shop Drawings shall include plans, elevations, sections, mounting details of component parts, point to point interconnection diagrams, elementary diagrams, single line diagrams, and any other drawings necessary to show the fabrication and connection of the complete item or system.
7 Submit Shop Drawings and/or diagrams for all specially fabricated items, modifications to standard items, specially designed systems where detailed design is not shown on the contract drawings, or where the proposed installation differs from that shown on the contract drawings.

8 Submittals shall include Riser Diagrams and Schematic Wiring Diagrams, complete conduit and wire requirements, outlet and junction box sizes and power requirements.

10 Prepare and stamp each submittal in a form indicating that the documents have been contractor reviewed, are complete and are in compliance with the requirements of the plans and specifications.

11 In general, catalog cuts, specification sheets, descriptive data, etc., shall be acceptable for submittal of all equipment specified by standard catalog numbers, unless directed otherwise by the Consultant.

12 Shop Drawings shall be clearly legible; poor reproductions or reduced photographic copies that are unreadable shall be rejected.

13 Before submission of Shop Drawings the Contractor shall carefully check same for proper capacity, operating characteristics, physical arrangement accessories, etc., as specified or noted on drawings. If Shop Drawings are submitted and indicate little or no prior checking by the Contractor, this shall be cause for rejection of item submitted.

14 Submittals shall include reference to page and paragraph of the specifications or drawing number.

15 Submittals not in compliance with the requirements of this Section will be returned without review.

16 The review of Shop Drawings will be general and shall not relieve the Contractor from sole responsibility for errors or omissions of any sort, not for proper fitting and construction on work or the furnishing of materials or work required by the Contract Documents but not shown or indicated on the Shop Drawings. Approval will not imply verification of required quantity of material, nor correctness of dimensions. Requests by the Owner's Representative for changes and corrections on Shop Drawings shall not be construed as an order for extra work under the contract.

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.17 Where material or equipment is identified by proprietary name, model number and/or manufacturer, furnish the named item, subject to acceptance. Suitability of only the named item has been verified. Where more than one item is named, only the first named item has been verified as suitable.

.18 Substituted items or items other than first named shall be equal or better in quality and performance and must be suitable for the available space, required arrangement and application. Submit any and all data necessary to determine the suitability of substituted items.

.19 Substitutions will not be permitted for specific items of material or equipment where specifically noted.

.20 Substituted items shall be submitted with a sample of each item for review by the Engineer.

.8 Record Drawings

.1 A separate set of clean, neat electrical contract prints shall be kept at the site at all times during the construction of the work for the express purpose of showing any and all changes made. The prints shall be marked up daily showing any rerouting of feeders or branch circuits, groupings of conduits or circuits, additional pull or junction boxes or any change whatsoever. The prints shall be marked up in neat, legible manner.

.2 Provide the Owner, upon completion and acceptance of the work, with a set a reproducible record drawings, clearly showing the path of the underground systems, locations of equipment, dimensional changes, and any deviations from the original contract drawings.

.9 Operating Instructions and Maintenance Manuals

.1 Operating Instructions

.1 Upon completion of all work, thoroughly instruct the Owner's representatives in the proper operation and maintenance of all electrical equipment and systems.

.2 Instructions shall be done only after completed systems have been put into operation and tested for proper operation and performance.
3 Instructions shall be given only by experts in the equipment or systems and shall include descriptions and demonstrations for procedures of operation, data record keeping, maintenance, etc.

2 Maintenance Manuals

1 Maintenance Manuals shall include the following for electrical work:

1 Index, neatly typed at front.

2 List of materials and equipment with name and address of vendor.

3 List of lamps, fuses (style and ampere rating), overload heaters, and other expendable equipment and devices with type, size or ordering description with name and address of vendor.

4 Operating, maintenance and installation instructions for all systems and components with name and address of vendor and servicing supplier.

5 A certificate of approval from the Electrical Inspector.

6 Final copies of Shop Drawings and Submittals.

7 Manufacturer's guarantee and warranties.

10 Identification

1 All equipment (disconnects, panelboards, starters, switches, control stations, etc.) shall be identified as to its function, equipment, or area served, etc.

2 Identification shall be engraved phenolic plates with approximately three-sixteenth (3/16) inch high black letters on white background. Plates shall be attached to front of enclosure with stainless steel machine screws.

3 Panelboards and equipment cabinets shall also be identified with stenciled letters, 3/4" high, on inside of cabinet door, colored to contrast with background.

4 All conduits containing electrical feeders shall be identified with vinyl cloth pipe label-markers by W.H. Brady or Seton. Label-markers shall be applied wherever
a conduit enters or leaves a switchboard, panelboard, or junction/pull box, and on each side of penetration of walls or floors. Provide individual numbers and letters to indicated feeder number and voltage.

.5 All junction/pull box covers shall be identified with stencils.

.6 No embossed plastic tape markers will be permitted for use in marking equipment.

.7 All underground branch circuits, etc. shall be identified with a continuous plastic tape equal to Allen Marking Tape. Tape shall be six inches wide, waterproof, chemically resistant, yellow, marked "Caution - Buried Electrical Line Below."

.8 All identification shall be subject to the approval of the Engineer.

.11 Equipment Deviations

.1 The Contractor shall notify the Engineer of any changes in electrical characteristics of equipment being installed as opposed to that specified.

.2 Where the Contractor proposes to use an item of equipment other than that specified or detailed on the drawings, which requires any redesign of the structure, foundations, wiring, or any other part of the layout, all such redesign, and all new drawings, and detailing required therefore shall, with the approval of the Engineer, be prepared by the Contractor at his own expense.

.3 Where such approved deviation requires a different quantity and arrangement of wiring, conduit, and equipment from the specified or indicated on the drawings, with the approval of the Engineer, the Contractor shall furnish and install such structural supports, wiring and conduit, and any other additional equipment required by the system, at no additional cost to the Owner.

.12 Supervision and Coordination

.1 Set in place and connect all electrical equipment furnished under this Section and all other Sections of the Contract.
14 Coordinate the electrical work with all other subcontractors. All work shall be so arranged that there will be no delay in the proper installation and completion of any part or parts of electrical equipment. All electrical work shall be installed in proper sequence with other trades without any unnecessary delay.

15 All equipment shall be fabricated to be installed in the building without field modification to the equipment or building.

16 Equipment shall be shipped or fabricated in sections of suitable size for entering the building and being removed from the finished building in the future if necessary.

17 Confer with all subcontractors engaged in the construction of the project, regarding the work which may in any way affect his installation. Whenever interference occurs, before installing any of the work in question, consult with all subcontractors and come to an agreement with them as to the exact location and level of his conduit parts of his equipment.

13 Storage and Protection of Equipment and Work

1 All materials and equipment shall be properly and effectively protected by the Contractor during the execution of the work.

2 All electrical equipment and materials to be used in the construction shall be properly stored and protected against the elements. All equipment shall be stored under cover, and shall not be stored at the construction site on the ground, in mud, water, snow, rain, sleet or dust. Large diameter cables may be stored on reels outside; however, all cable ends shall be waterproofed and the reels covered with weatherproof materials. Such weatherproof materials shall be heavy-duty, securely fastened and made impervious to the elements.

3 All gear and equipment shall be warehoused and protected. All gear and equipment shall be covered and protected from the elements and other damage and shall be stored in a clean, dry, heated atmosphere, under cover.

4 Equipment damaged as a result of the above conditions shall be properly repaired at the Contractor's expense or shall be properly repaired at the Contractor's expense or shall be replaced at the Contractor's
expense, if, in the opinion of the Engineer the equipment has been damaged to such an extent it cannot operate properly after repairs are made.

5 After connections to electrical equipment are complete and the equipment is ready for operation, all debris shall be removed from all enclosures. Such debris include dust, dirt, wire clippings, tape and insulation removed in order to make the connections.

6 All electrical enclosures exposed to construction damages such as paint spots, spackling or plaster, spatter, grout splashes, waterproofing compound, tar spots or runs and pipe covering compound splashes, shall be completely covered and protected against damage.

14 Cutting and Patching

1 All cutting of walls, floors, roofs, ceilings, and/or partitions for the passage of conduit, etc., and closing up of superfluous openings around them in connection with the work, including the removal of all debris caused thereby, shall be performed by the Contractor.

2 Do not cut structural members.

3 Patching shall be uniform in appearance and shall match with the surrounding surface.

4 Any work already in place that has been disturbed in the execution of the work shall be repaired and restored in harmony with the surrounding work.

15 Penetration of Waterproofing and Fireproof Construction

1 Coordinate the work to minimize penetration of waterproof and fireproof construction including exterior walls and interior construction. Where such penetrations are necessary, provide all necessary sleeves, shields, flashings, fittings and caulking to make penetrations absolutely watertight or fireproof.

16 Cleaning and Painting

1 Cleaning

1 All equipment and conduit shall be thoroughly cleaned of all cutting waste from reaming and tapping. All burrs and other foreign matters shall be removed. Should any part of the system be stopped up by such refuse after the various equipment and apparatus has been accepted, the
Contractor shall be required to pay for all labor and materials required to locate and remove the obstruction, and replace and repair all work in any way disturbed thereby. All enclosures, etc., shall be cleaned of all rubbish, plaster, and other debris at the completion of the work.

.2 Painting

.1 Paint all exposed metal surfaces, except for galvanized surfaces, of all electrical equipment in mechanical rooms and equipment spaces.

.2 Paint all exposed metal surfaces, except galvanized surfaces, in crawl spaces and damp or wet locations with one priming coat and one finishing coat of black asphaltum, the primary coat being applied immediately after installation.

.3 Do not paint nameplates or other elements where such application would interfere with operation or maintenance of equipment.

.4 All scratches or marred areas on factory painted equipment shall be touched up to match finish.

.17 Guarantee

.1 Guarantee the complete electrical system free from all mechanical and electrical defects for the period of one (1) year beginning from the day of final acceptance of the work or beneficial occupancy by the Owner, whichever occurs first.

.2 During the guarantee period, be responsible for the proper adjustments of all systems, equipment and apparatus installed by him and do work necessary to insure efficient and proper functioning of the systems and equipment.

.3 During the guarantee period, provide all necessary service and maintenance required by equipment manufacturers and/or suppliers.

.4 Upon receipt of notice from the Owner of failure of any part of the electrical installation during the guarantee period, new replacement parts shall be furnished and installed promptly at no cost.
.18 Examination of Site

.1 The Contractor shall examine the premises prior to submitting his bid and observe the conditions under which the work will be done or other circumstances which will affect the contemplated work. No work will be made subsequently in this connection for any error or negligence on the Contractor's part. No claim for extra compensation will be recognized for difficulties encountered which, in the opinion of the Owner, would have been revealed by proper examination.

.19 Workmanship

.1 All materials and equipment shall be installed and completed in a first class workmanlike manner and in accordance with the best modern methods and practice. Any materials installed which shall not present an orderly and reasonably neat or workmanlike appearance shall be removed and replaced when so directed by the Engineer. The removal and replacement of this work shall be done, when directed in writing by the Engineer, at the Contractor's expense.

.20 Manner of Installation

.1 Equipment Supports

.1 Provide equipment supports consisting of structural racks, hangers, rods, etc.

.2 Equipment supports shall be designed and constructed to safely support and distribute loads evenly over building areas, and withstand stresses to which they may be subjected.

.3 Equipment suspended or supported from above shall be secured by approved hanger rods other supports properly attached to the building structural system. Provide additional steel supports as necessary to prevent swaying of equipment. Hangers shall be as follows:

.1 Concrete - double plated expansion type anchors: Hilti, Philips, or approved equal. Loads shall not exceed 25% of tested pull out or shear strength.

.2 Precast concrete plank construction - drill holes through plank and bolt hanger rod to 4" x 4" x 1/4" steel plate on top of plank. Do not drill through cells.
3 Steel beams - iron or steel beam clamps.

4 Provide vibration isolators between enclosure of all vibration producing equipment, transformers, etc., and their supports or floor slab. Isolators shall be Mason Industrial Type NK Neoprene and cork sandwich.

21 Work in Existing Areas

1 In areas indicated to be renovated, remove the entire electrical installation except those portions indicated to be re-used. All unused conduit and wiring exposed after demolition shall be removed back to point of concealment. Unused wiring in concealed conduits shall be removed back to source (nearest point of usage).

2 Where electrical systems pass through the renovated areas to serve other portions of the premises, they shall be suitably relocated and the system restored to normal operation. Any outages in systems shall be coordinated with the Owner. Where duration of proposed outages cannot be tolerated by the Owner, provide temporary connection as required to maintain service.

22 Electrical Demolition

1 All demolition of existing electrical equipment, conduit, wiring, devices, lighting fixtures, etc. shall be performed under this Section of the specification. The areas of demolition are defined on the Architectural drawings, specific references are made on the electrical drawings.

2 The electrical demolition in the renovation areas indicated on the architectural drawings shall be complete and include all electrical work in the area unless noted otherwise.

3 Existing electrical systems passing through areas of demolition to serve equipment beyond the demolition areas shall remain in service, or be suitably relocated and restored to normal operation, throughout the demolition and reconstruction of the area. The contractor shall investigate and identify such equipment prior to demolition.

4 Provide temporary electrical service to equipment disturbed by the demolition until such time as the permanent service can be restored.
5. This work shall include the disconnection and removal of the existing building service as indicated on the drawings. Also included, unless otherwise noted, is the disconnection and removal of existing conduit, surface metal raceway, wiring, fittings, hangers and equipment including lighting fixtures, hangers and equipment, panelboards, communication systems, etc.

6. When existing electrical work is removed, remove all conduit, ducts, supports, etc., to a point below the finished floors or behind walls and cap. Such points shall be far enough behind finished surfaces to allow for the installation of the normal thickness of finish material. Identify abandoned conduits. Unused wiring in concealed conduits shall be removed back to source (nearest point of usage).

7. All existing electrical equipment which is to be removed shall be returned to the Owner at his request. All equipment refused by the Owner shall be disposed of by the Contractor.

8. Any outages in systems shall be coordinated with the Owner. Where duration of proposed outage cannot be tolerated by the Owner, provide temporary connections as required to maintain service.

9. It is hereby understood that the Contractor has carefully examined the site and all conditions affecting work under this Division. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions as indicated in the Contract Documents or obvious from observation at the site.

10. Do not do any work in any area of any existing or occupied building during normal hours, except in areas specifically assigned.

23 Connections to Existing Work

1. When the work specified hereunder connects to any existing equipment, conduit, wiring, etc., perform all necessary alterations, cutting, fitting, etc., of the existing work as may be necessary or required to make satisfactory connections between the new and existing work and shall leave the completed work in a finished and workmanlike condition, to the entire satisfaction of the Engineer.

2. When the work specified hereunder or under other Sections (Divisions) of the contract necessitates relation of existing equipment, conduit, wiring, etc.,
the Contractor shall perform all work and make all necessary changes to existing work as may be required to leave the completed work in a finished and workmanlike manner to the entire satisfaction of the Engineer.

.3 All existing electrical systems and life safety systems must remain in service during all phases of construction.

.4 Work in close cooperation with the Owner for any temporary outages.

.24 Motor and Equipment Connections

.1 See Section 15000 General Mechanical.

.2 Unless otherwise specified, the Contractor shall, under this Section, mount and align all starters, control devices, safety switches and other related equipment whether specified in this or other Sections of the specifications, except where such items are factory mounted on the driven equipment. The mounting and alignment of starters and control devices for the automatic temperature control system are included in the Sections in which the equipment is specified.

.3 Unless otherwise specified, the Contractor shall, under this Section of the specifications, provide all wiring, including conduit, wire, junction boxes, disconnecting switches, overcurrent protection, etc., not specified elsewhere in this specification, to and between all motors, starters, control devices and related electrical equipment, whether specified in this or other Sections of this specification, except where such items are factory wired as well as factory mounted on the driven equipment.

.4 Wiring for the automatic temperature control system is specified in other Sections of the specification.

.5 Unless otherwise specified, all wiring to motors, control equipment and related electrical equipment, shall be installed in conduits with flexible metal conduit connections utilized for final motor connections. Flexible conduits shall be large enough to accommodate motor feeder, ground conductors and control wires, whether or not so indicated on the drawings.

.6 Since the drawings are diagrammatic it is imperative that the Contractor obtain exact rough-in information for all equipment well in advance of actual installation to provide coordination for his and other trades.
.25 Tests (600 Volts)

.1 Provide tests and adjustments for the distribution system (600 volts and below), including branch circuits and the low voltage alarm and signaling systems.

.2 The test shall be performed by competent personnel and shall demonstrate to the satisfaction of the Engineer the following:

.1 That all lighting, power and control circuits are continuous and free from short circuits.

.2 That all circuits are free from unspecified grounds.

.3 That the resistance to ground of all non-grounded circuits is not less than one megohm.

.4 That all circuits are properly connected in accordance with applicable wiring diagrams.

.5 That all circuits are operable which demonstration shall include functioning of each control not less than 10 times and continuous operation of each lighting and power circuit for not less than 1/2 hour.

.6 That all alarm and signal systems and all emergency and exit light systems are properly functioning.

.7 That all loads, feeders, panelboards, etc. are balanced.

.8 That all motor rotations are correct.

.9 That all receptacles are grounded and polarized.

.3 Any defect shall be corrected at once, and the tests reconducted.

.4 All tests shall be conducted prior to the connection of any equipment which would be subject to damage from the testing exercise.

.5 All low voltage signaling and communication systems shall be checked and tested by a qualified representative of the equipment manufacturer. A report shall be submitted to the Engineer prior to final acceptance of the work.
.26 Finally

.1 On the completion of the work, the systems and equipment shall be carefully tested by the Contractor for actual operation, and the various pieces of equipment made to function as intended. The entire installation will not be ready for acceptance until it is functioning smoothly and satisfactorily.

.2 Lubricate, clean, adjust and test all equipment and systems in accordance with the manufacturer's instructions prior to initial operation. Do not operate equipment unless proper safety devices and controls are operational. Provide all maintenance and service for equipment which is operated during construction and protect the equipment.

.3 Where required, provide the services of the manufacturer's factory-trained servicemen or technicians to start up the equipment.

.4 Upon completion of the work, clean and restore all equipment to new condition.

.5 It is the intention of these specifications to fully cover all required work and equipment for the complete systems so that the whole installation, when accepted, shall be complete and in readiness for regular and satisfactory use.

END OF SECTION 16000
DIVISION 16 - ELECTRICAL (emin)

Section 16100 - BASIC METHODS AND MATERIALS

1.0 CONDUIT

.1 Electrical Metallic Tubing (E.M.T.), zinc-coated shall be in accordance with A.N.S.I. Standard C80, 3-1966 and bear the U.L. Label, and may be used throughout (3/4) inch minimum size) except where noted or rigid steel or flexible metal conduit is required.

.1 Provide expansion fittings in each E.M.T. conduit passing across a building expansion joint.

.2 Electrical Metallic Tubing couplings and box connectors shall be steel set-screw or compression ring type with insulated throat. E.M.T. not terminating in a metal enclosure shall terminate with a bushing.

.2 Rigid steel conduit and couplings zinc-coated for general use shall be in conformance with A.N.S.I. Std. C80-1-1966 and bear Underwriters' Laboratories, Inc. label. Rigid steel conduit in damp or wet locations shall have 2% nickel and 1% copper content.

.1 Provide expansion fittings in each conduit passing across a building expansion joint.

.2 Provide insulating bushings on all rigid conduit terminations.

.3 Rigid steel zinc-coated conduit (3/4 inch minimum size) shall be used under the following conditions:

.1 Encased in concrete.

.2 In exterior locations and exposed in crawl spaces or in other damp or wet locations.

.3 Where required by N.E.C. in hazardous areas, etc.

.3 Intermediate Metal Conduit (I.M.C.) and couplings shall be steel, galvanized, with threaded connections, conforming to the latest editions and revisions of Federal Specifications WW-C-581E and listed by Underwriters' Laboratories as conforming to Standard 1242.

.1 Intermediate Metal Conduit (I.M.C.) may be used throughout expect where rigid metal conduit is required by the N.E.C. and flexible metal conduit is permitted.
Flexible metal conduit shall be zinc-coated and meet U.L. requirements and Federal Specifications WW-C-566.b and shall only be used where required or indicated on the drawings (3/4 inch minimum size). Flexible metal conduit and associated fittings are not approved as a grounding wire bonded to all boxes. Flexible metal conduit shall be used in short lengths (18-36 inches for connection to fixed equipment, motor terminal boxes, dry type transformers, and other vibration producing equipment) and in lengths as allowed by N.E.C. between outlet boxes and recessed lighting fixtures.

1 Box connections for flexible metal conduit shall be 2 screw clamp type with insulated throats.

Polyvinyl Chloride (PVC) conduit shall be heavy wall (Type 40) conforming to the latest editions and revisions of Federal Spec. WC-1094, U.L. and NEMA Standard TC-2.

1 All joints shall be leakproof, moisture-proof permanent solvent cement type.

2 Conduit and fittings shall be manufactured by Carlon or equal.

3 PVC conduit may be used in lieu of rigid conduit where allowed.

All conduits shall be installed concealed in walls, above ceilings, etc. throughout, except as follows:

1 Where suspended ceilings are not provided.

2 In vertical shafts, wire closets, etc., and mechanical and electrical equipment spaces where concealment is not practical.

3 At surface-mounted panelboards in otherwise finished spaces, limited to vertical runs above and below panel.

4 Where required for equipment connections.

5 Where indicated on the drawings.

1 All conduit shall be installed as neatly as possible to afford least interference with other trades. Exposed conduit and conduit above suspended ceilings shall be rigidly supported by suitable hangers. All conduits above suspended ceilings shall be supported independently from the ceiling and ceiling support systems. In particular, conduits above ceilings with removable
panels or tiles shall be located and supported, in such a manner, that it shall not interfere with or inhibit removal of any removable panel or tile. Particular attention shall also be given to conduit arrangements to insure access to mechanical systems for required maintenance (such as periodic replacement of filters in air handling units, etc). Exposed conduits shall be properly supported and closely follow ceiling contours. Conduits shall be located a minimum of 3 inch from steam or hot water piping.

2.0 BOXES

.1 Flush boxes for switches and receptacles shall be a minimum of 4 inch square with appropriate raised covers.

.2 Boxes less than 50 cubic inches in size to accommodate wiring devices installed flush in exterior locations, damp locations, or exposed on walls shall be cast boxes equal to Crouse Hinds type "FS/PD" Condulets.

.3 Boxes less than 50 cubic inches in size to accommodate wiring devices exposed on walls and used for junction or pull boxes shall be minimum 4 inch square pressed steel, equipped with matching covers.

.4 Boxes less than 50 cubic inches in size used for junction or pull boxes shall be pressed steel with appropriate blank covers.

.5 All boxes 50 cubic inches and larger shall be constructed of sheet steel and equipped with flat sheet steel covers held in place with brass machine screws. All joints shall be welded and ground to remove burrs. Boxes and covers shall be hot dip galvanized.

.6 Pull and junction boxes shall be provided wherever shown, specified, or required by field conditions or the N.E.C. to facilitate wiring installation.

.7 Boxes flush in or exposed on walls shall be exactly plumb. Flush boxes shall not project beyond the finished wall surface nor shall wall surfaces project more than 1/8 inch beyond the lips of flush boxes. Major axis of receptacle and switch outlets shall be vertical.

3.0 WIRING

.1 All wiring shall be soft drawn copper having 98% conductivity. Conductor insulation shall be N.E.C. type THW,
THHN/THWN or XHHW, 600 volt. All wiring #8 and larger and all wiring for controls shall be stranded.

.2 Provide wiring manufactured by American Insulated Wire Corporation, General Cable, Plastic Wire and Cable Corp., Phelps Dodge, Anaconda, Triangle, Manhattan, Houston or an approved equivalent.

.3 Wiring for general branch circuits shall be sized as follows unless otherwise indicated:

<table>
<thead>
<tr>
<th>Home Run Length and Wire Size</th>
<th>Circuit Length and Wire Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-60' #12</td>
<td>0-100' #12</td>
</tr>
<tr>
<td>60-100' #10</td>
<td>over 100' #10</td>
</tr>
<tr>
<td>over 100' #8</td>
<td></td>
</tr>
</tbody>
</table>

.4 All wiring shall be color coded as follows:

<table>
<thead>
<tr>
<th>Phase</th>
<th>120/208 Volts</th>
<th>277/480 Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Black</td>
<td>Yellow</td>
</tr>
<tr>
<td>B</td>
<td>Red</td>
<td>Brown</td>
</tr>
<tr>
<td>C</td>
<td>Blue</td>
<td>Orange</td>
</tr>
<tr>
<td>Neutral</td>
<td>White</td>
<td>Gray</td>
</tr>
<tr>
<td>Ground</td>
<td>Green</td>
<td>Green</td>
</tr>
</tbody>
</table>

4.0 SPLICING (600 VOLTS)

.1 For splices in branch circuits, use "Wirenuts", "Scotchlocks" or equal for sizes #12-#10, mechanical connectors by O.Z., Burndy, T & B or equal for sizes #8 and larger. All splices not self-insulating shall be wrapped with Scotch #33 or equivalent tape or enclosed in suitable molded covers.

.2 Devices shall not be used as splices. Receptacles on looping wiring shall be wired with pigtails (phase line, neutral and grounding wire) to allow replacement or removal without opening circuit.

5.0 WIRING DEVICES

.1 Lighting control switches: 120/277 volts A.C. type, 20 ampere, Pass & Seymour #20AC1 series (brown) or an approved equivalent by Arrow-Hart, Hubbell, or Leviton.

.2 Receptacles: Polarized grounding type, 20 ampere, 125 volt, 2 pole, 3 wire, duplex, NEMA configuration 5-20R, Pass & Seymour #5362 (#5352 - Commercial grade) (brown) or an approved equivalent by Hubbell, Arrow-Hart, or Leviton.
3 Ground-Fault Circuit Interrupting (GFCI) type receptacles: Polarized grounding type, 20 ampere, 125 volt, 2 pole, 3 wire, duplex, NEMA configuration 5-20R, Pass & Seymour #2091-FI (ivory) with #RF-26-I plate or an approved equivalent by Hubbell, Arrow-Hart or Leviton.

4 Switch and Receptacle Plates: shall be "430" stainless steel, nominal .032 inch thickness.

6.0 LIGHTING FIXTURES

1 Provide lighting fixtures complete with all components and lamps for all lighting outlets indicated on the drawings unless noted to the contrary herein or on the drawings.

2 Types of fixtures shall be as indicated by letters on the drawings adjacent to symbols and shall be as herein specified.

3 Refer to architectural finish schedules and details of ceiling construction. Catalog numbers given for recessed fixtures may not necessarily reflect the exact type in the specified manufacturer's series for the ceiling system provided. Provide proper unit of series specified with all mounting accessories to suit ceiling systems in which they are installed.

4 Finish of fixtures shall be manufacturer's standard unless otherwise specified hereinafter.

5 Fluorescent lamp ballasts shall be Class "P", CPM-ETL certified, high power factor, "energy-savings" type with "A" sound rating.

6 Lamps shall be provided for all fixtures and shall be as follows:

1 Fluorescent - 48 inches shall be rapid start, "energy-savings" type, cool white, 35 watt, 430 ma, T-12, and shall have an initial output of 2850 lumens.

2 Incandescent - shall be 130 volt, general service, inside frosted. Where special size bulbs are required, and where spots or floods are required, they shall be provided as indicated for the specific fixture.

7 All lenses or diffusers on fluorescent fixtures hereinafter specified shall be formed from virgin acrylic plastic, minimum 0.125 inches thickness.
7.0 PANELBOARDS

.1 Panelboards shall be constructed in accordance with the latest editions and revisions of Specifications W-P115a, and Underwriters' Laboratories Standard 67. Panelboards used for service entrance shall be service entrance rated and bear the U.L. service entrance label.

.2 Panelboards shall be dead-front, safety-type and shall contain main circuit breakers, main lug ratings, branch circuit breakers and bussed spaces as indicated.

.3 Lighting and appliance branch circuit panelboards for 277/480 volts or 120/208 volts service shall be bolt-on circuit breaker type equipped with quick-make, quick-break, trip indicating, switch duty rated, thermal-magnetic molded case circuit breakers.

.1 Branch breakers in 120/208 volt panelboards shall have a minimum interrupting capacity of 10,000 R.M.S. symmetrical amperes at 120 volts.

.2 Panelboards for 120/208 volts shall be General Electric Type AQ or equal by Square D or Westinghouse.

.3 Branch breakers in 277/480 volt panelboards shall have a minimum interrupting capacity of 14,000 R.M.S. symmetrical amperes at 277 volts.

.4 Panelboards for 277/480 volts shall be General Electric Type AE or equal by Square D or Westinghouse.

.4 Tandem breakers will not be permitted.

.5 Two or three pole circuit breakers shall be common trip type. Single pole breakers with tie handles will not be permitted.

.6 Provide ground busses in panelboards. Ground bus shall be similar in all respects to neutral bus.

.7 Provide nameplate with all pertinent data (i.e. actual voltage, phase, wires, main lug and bus amperes, AIC rating, manufacturer and type), and feeder wire size.

.10 Panelboards shall contain a typed directory of circuits, adequately protected in a metal frame with clear plastic cover, indicating type and location of device connected on each circuit.

.11 Circuit numbers as shown on the drawings for branch circuit indicate groupings of loads on circuits and are not necessarily to be intended as actual circuit number in
panelboards. Circuits shall be so arranged as to balance the loads over the phases as evenly as practical.

.12 All panelboards shall be installed on galvanized formed steel channels designed to distribute the weight on the supporting wall.

8.0 SAFETY SWITCHES

.1 Safety switches shall be constructed in accordance with the latest editions and revisions of N.E.M.A. Standard KS-1, Federal Specification W-S-685C, and Underwriters' Laboratories Standard 98.

.2 Switches shall be fusible or non-fusible as indicated or as required by the equipment served, horse-power rated (U.L. listed), quick-make, quick-break, heavy-duty (general-duty) type with integral arc suppressors and handle as part of enclosure, not cover.

.3 Switches shall have general purpose service mounted N.E.M.A. 1 or 3R enclosures as indicated or required by locations. All enclosures shall be designed to permit padlocking the "open/off" position.

.4 Switches on 120/208 volts service shall be rated 250 volts. Switches on 277/480 volts service shall be rated 600 volts.

.5 Switches shall be manufactured by Square D, General Electric or Westinghouse.

.6 Provide identification label on front of enclosure indicating actual voltage, phase and wires, fusible or non-fusible.

9.0 FUSES

.1 Fuses shall be current-limiting with interrupting rating of 200,000 amperes RMS symmetrical.

.2 Buses for motor protection shall be U.L. Class RK-1, dual-element, time-delay, Bussmann Type LPN-RK (250 volts) or Type LPS-RK (600 volts).

.3 Fuses shall be by Bussman or equal by Gould-Shawmut.

.4 A fuse identification label, showing type and size, shall be placed inside the door of each switch.

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10.0 GROUNDING

.1 Grounding of raceways, equipment, and system neutrals shall be in accordance with the requirements of the National Electrical Code.

11.0 "GREEN WIRE" GROUNDING SYSTEM

.1 Provide a "Green Wire" equipment grounding conductor system to interconnect the equipment grounding terminal of all receptacles, motors, and equipment and the equipment grounding bus of the associated panels. The number of "Green Wire" conductors in any cross-section of raceway shall equal the number of neutral conductors in the same cross-section. This system shall be in addition to the "Raceway" grounding system.

.2 The grounding conductor shall be wired at receptacles with pigtails such that removal of that receptacle will not open the grounding to other receptacles.

.3 "Green Wire" equipment grounding conductor segments are in addition to, but shall be run with, indicated phase and neutral conductors. The size of the "Green Wire" conductor shall equal the phase conductor size for each respective run segment, unless otherwise indicated.

12.0 TELEPHONE SERVICE

.1 Wall outlets for telephone shall be minimum 4 inch square 2-1/8 inch deep flush boxes with raised single gang covers and blank stainless steel plates.

.2 Provide 3/4 inch conduit from each outlet to nearest accessible corridor ceiling space.

END OF SECTION 16100
ELECTRICAL SPECIFICATIONS

1.0 DESCRIPTION OF WORK

.1 Provide a lighting fixture in each dormitory bedroom as follows:

1. Patapsco Hall
2. Chesapeake Hall
3. Susquehanna Hall

Total: 512 bedrooms

.2 Provide surface-mounted raceway and wiring from an existing receptacle and reconnect existing wiring as indicated.

2.0 SCOPE

.1 Provide all labor, materials, equipment, supervision and services necessary for and incidental to the complete installation of all electrical work as shown on the drawings, specified herein, or required to deliver to the Owner a complete installation, ready for continuous and satisfactory operation.

.2 All items, etc. necessary or required to make the electrical installation complete and operable shall be understood as part of the work.

.3 Any questions as to the scope of the electrical work shall be submitted to the Engineer for resolution prior to bid and/or installation.

3.0 GENERAL

.1 Permits, Inspections and Certificates

.1 Obtain and pay for all permits, inspections and certificates. Give all necessary notices, file all necessary plans, prepare all necessary documents, and obtain all necessary approvals of all governmental departments and organizations having jurisdiction.

.2 Codes

.1 Codes: The electrical work covered under the specifications and drawings shall be performed in strict accordance with:

.2 Requirements of Middle Department Inspection Agency (MDIA).
.4 Baltimore County Code (latest edition).

.3 Guarantee

.1 Guarantee the complete electrical system free from all mechanical and electrical defects for the period of one (1) year beginning from the day of final acceptance of the work or beneficial use by the Owner, whichever occurs first.

.2 Upon receipt of notice from the Owner of failure of any part of the electrical installation during the guarantee period, new replacement parts shall be furnished and installed promptly at no cost.

.4 Examination of Site

.1 The Contractor shall examine the premises prior to submitting his bid and observe the conditions under which the work will be done or other circumstances which will affect the contemplated work. No work will be made subsequently in this connection for any error or negligence on the Contractor's part. No claim for extra compensation will be recognized for difficulties encountered which, in the opinion of the Owner, would have been revealed by proper examination.

.5 Workmanship

.1 All materials and equipment shall be installed and completed in a first class workmanlike manner and in accordance with the best modern methods and practice. Any materials installed which shall not present an orderly and reasonably neat or workmanlike appearance shall be removed and replaced when so directed by the Engineer. The removal and replacement of this work shall be done, when directed in writing by the Engineer, at the Contractor's expense.

4.0 SURFACE MOUNTED RACEWAY

.1 Raceways and outlet/device boxes shall be Wiremold 500, 700, 1000 series or equal with half finish, used as follows:

.1 #500: 2#10, 3#12, 4#14 wires maximum

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.2 Provide elbows, boxes, supports, etc. by the raceway manufacturer. Use boxes and fittings best suited to conditions of installation and intended use. Finish shall match raceway finish.

5.0 WIRING

.1 All wiring shall be soft drawn copper having 98% conductivity. Conductor insulation shall be N.E.C. type THW, THHN/THWN or XHHW, 600 volt. All wiring #8 and larger and all wiring for controls shall be stranded.

.2 Provide wiring manufactured by American Insulated Wire Corporation, General Cable, Plastic Wire and Cable Corp., Phelps Dodge, Anaconda, Triangle, Manhattan, Houston or an approved equivalent.

.3 All wiring shall be color coded to match existing.

6.0 SPLICING (600 VOLTS)

.1 For splices in branch circuits, use "Wirenuts", "Scotch-locks" or equal for sizes #12-#10.

.2 Devices shall not be used as splices. Receptacles on looping wiring shall be wired with pigtails (phase line, neutral and grounding wire) to allow replacement or removal without opening circuit.
EXISTING SPLI WIRE RECEPTACLE: TYPICAL
EXISTING WIRING TO REMAIN: TYPICAL

TOILET

LIGHTING FIXTURE
(LOCATE IN CENTER OF ROOM)

BEDROOM

SURFACE MOUNTED RACEWAY

EXISTING LIGHT SWITCH

PROVIDE SURFACE MOUNTED OUTLET/DEVICE BOX AND REINSTALL EXISTING DEVICE. RECONNECT EXISTING WIRING TO HAVE EXISTING LIGHT SWITCH CONTROL NEW LIGHTING FIXTURE. CONNECT BOTH HALVES OF SPLIT WIRED RECEPTACLES (TOTAL 3) DIRECTLY TO UNSWITCHED PHASE CONDUCTORS.

FLOOR PLAN - TYPICAL DORMITORY ROOM

NO SCALE
EXISTING WIRING SCHEME

LIGHTING FIXTURE

EXISTING SWITCH

SPLIT-WIRED DUPLEX RECEPTACLE - TYPICAL

EXISTING SPLIT-WIRED DUPLEX RECEPTACLE - TYPICAL
CONNECT PHASE CONDUCTORS TOGETHER

NEW WIRING SCHEME
<table>
<thead>
<tr>
<th>TYPE</th>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
<th>MOUNTING</th>
<th>LAMPS NO.</th>
<th>WATTS</th>
<th>LAMP CODE</th>
<th>V.</th>
<th>MANUFACTURER &amp; CATALOG NO.</th>
<th>OTHER MANUFACTURERS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td></td>
<td>SURFACE MOUNTED FLUORESCENT, 4' LONG, WITH WRAP-AROUND ACRYLIC PRISMATIC DIFFUSER; WHITE ENAMEL END PLATES; THERMALLY-PROTECTED, CLASS P, HPS BALLAST WITH SOUND RATING A, ENERGY-SAVING TYPE; AND ALL NECESSARY ACCESSORIES AND MOUNTING HARDWARE</td>
<td>CEILING</td>
<td>2</td>
<td>35</td>
<td>F40T12 RS-ES COOL WHITE</td>
<td>120</td>
<td>LITHONIA # LB-240-A-120-ES</td>
<td>KEENE COLUMBIA</td>
<td></td>
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