

BLOCK
RECEIVED

JUL 16 1993

DIV. OF INSPECTION

548

LOT 21

ADDRESS (SITE)

DRUM POINT SCHOOL
43 DRUM POINT RD
BRICK NJ

PERMIT NO.

1625-93

MAIL

CONSTRUCTION PERMIT
APPLICATION

I. IDENTIFICATION

1. Proposed Work-site at: DRUM POINT SCHOOL
2. Name of Owner in Fee: BRICK TWP. BD. OF ED Tel. (908) 477-3800
Address 101 HENDRICKSON AVE BRICK NJ
street municipality zip code
3. Ownership in Fee: Public ☒ Private ☐
4. Principal Contractor: EVERETT H. THORNE Tel. (908) 842-6919
Address 11 CATHERINE ST. RED BANK
- License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
Federal Emp. No. 21-07046440 Social Security No. _____
5. Architect or Engineer YEZZI ASSOC. Tel. (908) 240-3433
Address 1035 HOOPER AVE TOMS RIVER NJ
6. Responsible Person PETER THORNE Tel. (908) 842-6919
In Charge of Work

II. PROPOSED WORK

1. ☐ Minor Work (single trade)
2. ☐ Small Job (\$5,000 and no prior approvals)
3. ☐ New Building
4. ☒ Addition
5. ☒ Alteration / ROOFING
6. ☐ Fire Protection
7. ☐ Plumbing
8. ☐ Electrical
9. ☐ Asbestos Abatement
10. ☐ Demolition

TOTAL COSTS

Est. Cost

409,200

OPTIONAL (for office use only)

Plans Rec'd By	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Re-viewer
<u>TH</u>		<u>7/14/93</u>	<u>7/21/93</u>	<u>SR</u>	Approval	Rejection
		<u>NO PLAN</u>				

III. DO YOU WANT: (optional) 1. ☐ Partial Releases 2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow
Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

V. FEE SUMMARY (for office use only)

	Update	Update
1. Building		
2. Electrical		
3. Plumbing		
4. Fire Protection		
5. Other		
6. Subtotal	\$ <u>3075</u>	
7. Less 20% for State Plan Review		
8. Subtotal	\$	
9. DCA Training Fee		
10. Subtotal	\$	
11. Cert. of Occupancy		
12. Other		
13. TOTAL	\$	

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories 1
2. Height of Structure 20 ft.
3. Area—Largest Floor 47,400 sq. ft.
4. Building Area—All Floors _____ sq. ft.
5. Volume of Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____ sq. ft.
no _____
11. Fire Grading _____
12. Max. Live Load _____
13. Max. Occupancy Load _____

(office use only)

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No of dwelling units:

Before Construction _____

After Construction _____

Net gain or loss _____

B. NON-RESIDENTIAL

1. State Specific Use:

2. Use Group:

3. Change in Use Group.
Indicate Former:

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION

(to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name EVERETT H. THORNE CO INC

Address 11 CATHERINE ST.
RED BANK NJ 07701

Telephone (908) 842-6919

Signature [Signature] Date 7/12/93

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Fire Department									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Dept. of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Dept. of Environmental Protect.									
☐ Utility Dig No.									
☐ Other									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition	Name of Code & Edition	Other
Building _____	Energy _____	
Electrical _____	Barrier Free _____	
Plumbing _____	Flood Hazard _____	
Fire Protection _____	As Built Elevation Cert. _____	
Mechanical _____	Other _____	

X. CERTIFICATES ISSUED (office use only)

	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____
☐ Temporary Certificate of Occupancy	No. _____
☐ Continued Certificate of Occupancy	No. _____
☐ Certificate of Occupancy	No. _____
☐ Certificate of Approval	No. _____
☐ None	

Drum Point School



CONSTRUCTION PERMIT

Date Issued

Control #

Permit #

7/21/93

1625-93

IDENTIFICATION Block

548

Lot

21

Work Site Location

63 Drum Pt Rd

Contractor

Everett H. Thomas

Owner in Fee

B.T. Bd of Education

Address

Address

101 New Brunswick Ave

Tele. ()

Tele. ()

Lic. No. or Bldrs. Reg. No.

Exp. Date

Federal Emp. No.

or Social Security No.

Is hereby granted permission to perform the following work:

☐ BUILDING

☐ PLUMBING

☐ OTHER

☐ ELECTRICAL

☐ FIRE PROTECTION

DESCRIPTION OF WORK:

Roofing

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$

409,200

CONSTRUCTION OFFICIAL

U.C.C. Form F-170A

PAYMENTS (Office Use Only)

Building

Plumbing

Electrical

Fire Protection

Other

Other

DCA Training Fee

Cert. of Occ.

Other

Total

Check No.

Cash

Collected By:



Date Received
Date Issued
Control #
Permit #

7/21/93
1625-93

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 548 Lot 21
Work Site Location DRUM POINT SCHOOL
63 DRUM POINT RD. BRICK N.J.
Owner in Fee BRICK TWP. BOARD OF EDUCATION
Address 101 HENBRICKSON AVE
BRICK, N.J. 08724
Tele. (908) 477-2800
Contractor EVERETT H. THORPE CO. INC
11 CATHERINE ST
Address RED BANK NJ 07701
Tele. (908) 842-6919
Lic. No. or Bids. Reg. No. _____
Federal Emp. No. 21-07046440 or Social Security No. _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner
of record and am authorized to make this application.
Signature David J. Thorpe

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK
INSTALL BUILT-UP ROOF

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial	INSPECTIONS	Dates (Month/Day)	Initial
			Type:	Failure	Approval
☐ No Plans Req.			Footing		
☒ All	<u>7/21/93</u>	<u>HT</u>	Foundation		
☐ Footing			Slab		
☐ Foundation			Frame		
☐ Frame			Insulation		
☐ Other			Finishes:		
Joint Plan Review Required:			Energy		
☐ Elec. ☐ Plumb. ☐ Fire			Mechanical		
SUBCODE APPROVAL			TCO		
☐ CO ☐ CCO ☐ CA			Other		
Date:			Final		
Approved By:					

B. BUILDING CHARACTERISTICS

Use Group X Present X Proposed _____
Constr. Class Present Proposed _____
No. of Stories 1 Ft. _____
Height of Structure 80 Ft. _____
Area—Largest Floor 47,400 Sq. Ft. _____
Total Bldg. Area/All Floors _____ Sq. Ft. _____
Volume of Structure _____ Cu. Ft. _____
Total Land Area Disturbed _____ Sq. Ft. _____

Est. Cost of Bldg. Work:

1. New Bldg. \$ 409,200
2. Alteration \$ 409,200
3. Total (1+2) \$ 409,200

(Office Use Only)

FEE

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

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\$ _____

Brick Township



ELECTRICAL
SUBCODE
TECHNICAL SECTION



Date Received
Date Issued
Control #
Permit #

JUL 30 93 0 9 8 8 6

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 548 Lot 21
Work Site Location 41 Drum Point Rd., School
Brick, NJ

Owner in Fee Brick Township B.O.E.
Address 101 Hendrickson Ave.
Brick, NJ 08724

Tele. () 477 2800
Contractor Sodon's Electric, Inc.

Address 25 W Highland Ave., PO Box 408
Atlantic Highlands, NJ 07715

Tele. () 291 1713

Lic. No. 1500A
Federal Emp. No. 222401656 or Social Security No. _____

B. ELECTRICAL CHARACTERISTICS

☐ Reinspection ☐ Resale ☐ Meter Set
☐ Pole/Pad # _____ ☐ Temporary ☐ Other _____
Building Occupied as _____ Utility Co. _____
Est. Cost of Elec. Work \$ 1650.

JOB SUMMARY (Office Use Only)

PLAN REVIEW:		INSPECTIONS:		Dates (Month/Day)		
		Type:	Failure	Failure	Approval	Initial
Joint Plan Review Required:						
☐ No Plans Required						
☐ Bldg. ☐ Plumb. ☐ Fire						
☐ Elec. Plans Approved						
Date: _____		TCO				
Approved by: _____		Other				
		Service				
		Final				
SUBCODE APPROVAL:						
☐ CO ☐ CCO ☐ CA						
Date: _____		Temp. Cut-in-Card Date Issued				
Approved by: _____		Final Cut-in-Card Date Issued				
		Line Dept.				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of _____
record and am authorized to make this application
and perform the work listed on this application.

☒ Licensed Electrical Contractor ☐ Exempt Applicant

Signature-Contractor Seal

D. TECHNICAL SITE DATA

NO.	SIZE	ITEM	DATE RECEIVED
<u>11</u>		Fixtures (1)	
		Receptacles (2)	
		Switches (3)	
<u>11</u>		Total 1 + 2 + 3	
		Range	
		Oven(s)	
		Surface Unit	
		Dishwasher	
		Garbage Disposal	
		Dryer	
		A/C Unit	
		Burglar Alarms	
		Intercoms Panels	
		Smoke Detectors	
		Whirlpool/spa	
		Pool Bonding	
		Pool Filter Motor	
		Pool Lights	
		Water Heater(s)	
		Central heat:	
		oil, gas or elec.	
		Baseboard Heat Units	
		Thermostats	
		Heat Pump	
		Pump(s)	
		Motor Control Center/Sub Panels	
		Signs	
		Light Standards	
		Motors—Fractional H.P.	
		Motors—All Others	
		Transformers	
		Generators	
		Service Entrance	
		Other	

FREE (Office Use Only)

Paid ☐ Check # _____	Administrative Surcharge	\$ _____
Collected by: _____	Minimum Fee	\$ _____
	TOTAL FEE	\$ <u>1650.</u>

called
7-15-93 bD.



Township of Brick

401 Chambers Bridge Road, Brick, N.J. 08723 (201) 477-3939

Office of
Division of Inspections

CHECK LIST

Drawn Point, School

Re: Block 548 Lot 21

Please be advised that your application for a construction permit for the subject property has been rejected due to deficiencies in the following areas:

- Administrative
- Zoning
- Engineering
- Building
- Plumbing
- Electric
- Fire

No. P.D.

See attached review check list (s) for details as to the reason your submission has been rejected. Please revise your application accordingly and resubmit to this office.

There is a 20 working day time limit for review of all documents submitted with a building permit application. This time limit ceases in the event of a rejection of any type, and starts over again when the rejection/(s) have been corrected and the application resubmitted.

Arthur J. Cierzo, Construction Official



YEZZI ASSOCIATES
ARCHITECTS PLANNERS

YEZZI SAPP PA
Architects Engineers Planners

11/19/93

**1993 REROOFING PROJECT
BRICK BOARD OF EDUCATION**

DRUM PIONT ROAD SCHOOL

Massimo Francis Yezzi, Jr. R.A.P.P.
1035 Hooper Avenue, Suite 4
P.O. Box 1638, Toms River, NJ 08754

Tel (908) 240-3433
(908) 240-3438
Fax (908) 240-3463

Architecture

Planning

Interior Design

Index of Specifications

REROOFING AT DRUM POINT ROAD SCHOOL, DRUM POINT ROAD, BRICK, NEW JERSEY 08724

1.0	Preface	
1.1	Notice To Bidders Advertisement	
1.2	Bid Proposal Forms	
1.3	Instructions to Bidders	
1.4	Supplementary Instructions to Bidders	
1.5	General Conditions of Contract for Construction	
1.6	Supplementary Conditions for All Contractors	
2.0	Section Number	Section Identification
	01000	General Requirements
	01300	Submittals and Substitutions
	01310	Construction Schedule
	01710	Cleaning
	07500	Roofing
	07501	Asbestos Report
3.0	Construction Documents:	Drawings A-1 through A-5

NOTICE TO BIDDERS ADVERTISEMENT

Public notice is hereby given that sealed bids for furnishing labor, materials, and services for: REROOFING PROJECTS AT VARIOUS LOCATIONS, BRICK SCHOOL SYSTEM, BRICK, NEW JERSEY. ALL PROJECTS WILL BE SEPARATE BIDS.

1. SCHOOL BUILDINGS TO BE REROOFED - ALL SEPARATE BIDS:

- 1.1 EMMA HAVENS YOUNG SCHOOL - 50,000 S.F.
- 1.2 BRICK HIGH SCHOOL - 50,000 S.F.
- 1.3 DRUM POINT ROAD SCHOOL - 50,000 S.F.
- 1.4 LANES MILL SCHOOL - 50,500 S.F.
- 1.5 MIDSTREAMS ELEMENTARY SCHOOL - 40,000 S.F.
- 1.6 BRICK MEMORIAL HIGH SCHOOL - 21,000 S.F.

2. GENERAL SCOPE OF WORK:

- 2.1 REMOVE ALL EXISTING ROOFING COMPLETELY DOWN TO STRUCTURAL DECK.
- 2.2 ALL ITEMS REMOVED AND TO BE DISPOSED OF SHALL BE DUMPED IN AN APPROVED LAND FILL IN OCEAN COUNTY.
- 2.3 PROVIDE AND INSTALL NEW ROOF TOP INSULATION.
- 2.4 PROVIDE AND INSTALL NEW ROOFING SYSTEMS AS SPECIFIED.

PREBID MEETING: There will be a voluntary prebid meeting to visit all sites. All those interested in attending said meeting should assemble at the Brick Township Board of Education Administrative Office, 101 Hendrickson Avenue, Brick, NJ, at 9:30 a.m., June 23, 1993.

BIDS WILL BE RECEIVED:

Place: BRICK SCHOOLS BOARD OF EDUCATION
101 HENDRICKSON AVENUE
BRICK, NEW JERSEY 08724

TIME: 2:00 P.M.

DATE: JUNE 30, 1993

and then at said place publicly opened and read aloud.

Contractors are advised that the Owners will award a contract to the lowest qualified Bidder or Bidders in accordance with the Laws of 1971, Chapter 198 N.J.S.A. 40A:11-1 etseq.

Contract Documents are "available for review" in the office of the Architect, YEZZI ASSOCIATES, ARCHITECTS AND PLANNERS, 1035 HOOPER AVENUE, TOMS RIVER, NEW JERSEY 08753. Contractors may purchase copies of the Contract Documents in the office of the Architect for the sum of Fifty Dollars (\$50.00) per set, payable to the Architect, said deposit is non-refundable.

NOTICE TO BIDDERS ADVERTISEMENT -PAGE 2 OF 3

All proposals must be submitted on approved forms in sealed envelopes plainly endorsed and shall include the name and address of the Bidder and the contract being bid. Bids shall be submitted at the above time and place. Bids will not be received before or after the time set forth. Bids by mail will not be accepted.

Each Bidder must deposit with his Bid, security in the form of a Bid Bond, Treasurer's Check or Certified Check in an amount of not less than 10% of the total bid amount, including alternates, if any. The deposit shall not be more than \$20,000.00.

The successful Bidder will be required to furnish a Bond from a Surety Company authorized to do business in the State of New Jersey, satisfactory to the Owner, in the full amount of the contract price for the faithful performance of the work and to guarantee the payment of all claims as required by law and the consent of such Surety to enter into the Bond shall be attached to the Bid.

All Contractors please take notice of the following excerpt from Chapter 127, P.L. 1977:

"During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor or Subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, national origin, ancestry, marital status, or sex. Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause; in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, or sex.
- b. The Contractor or Subcontractor, where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, or be provided by the agency contracting officer, advising the labor union of workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment."

NOTICE TO BIDDERS ADVERTISEMENT - PAGE 3 OF 3

A corporation submitting a Bid in response to this Advertisement shall accompany such Bid with a resolution authorizing its proper Officer to submit such a Bid and authorizing such Officers to execute a contract in the event its Bid is accepted.

Bidders are advised that the Owner will award the contract to the lowest qualified Bidder. The Owner reserves the right to reject any or all Bids, and to waive any informalities in any Bids, as may be deemed best for the interest of the Owner.

Attention is called to the fact that all laws of the State of New Jersey applicable to the aforesaid work shall govern. Prevailing Wage Rates as determined by the State of New Jersey, Department of Labor and Industry, Wage and Hour Bureau, must be paid on this project.

Bidders and their representatives are invited to be present when the proposals are received and opened.

Project to start on JULY 1, 1993, and be complete by AUGUST 31, 1993.

Project to have a Liquidating Damage Clause of \$300.00 per day.

Successful bidder will be allowed to work seven (7) days a week, twelve (12) hours a day. No additional compensation will be provided by the owner for any overtime required to finish the project on schedule.

END OF SECTION

BID PROPOSAL PACKET - REROOFING AT DRUM POINT ROAD SCHOOL

CHECK LIST

The following to be completed and submitted with bid proposal:

1. Bid Proposal Form (page 1 to 3)
2. Bid Security
3. Bid Bond (page 4)
4. Affirmative Action Affidavit (page 5 to 7)
5. Subcontractors List (page 8 & 9)
6. Non-collusion Affidavit (page 10)
7. Disclosure Statement (page 11)
8. Consent of Surety (page 12)
9. Right to Know Letter (page 13)
10. Any Addendums shall be listed on Bid Proposal Form and dated.
11. State of New Jersey, Division of Building and Construction, Notice of Prequalification Form. (Sample Attached - page 15)
12. Certified Payroll Records. (page 14)
13. Statement of Roofing Manufacturer's Qualifications (page 16)

BID PROPOSAL FORM

FOR: REROOFING AT: DRUM POINT ROAD SCHOOL - 50,000 S.F.
DRUM POINT ROAD
BRICK, NEW JERSEY 08724

TO: BRICK TOWNSHIP BOARD OF EDUCATION
101 HENDRICKSON AVENUE,
BRICK, NEW JERSEY 08724

DATE: JUNE 30, 1993

TIME: 2 P.M.

STATEMENT OF FACT: The undersigned hereby declares that they have carefully examined the Bidding Documents, Plans, and Specifications covering the REROOFING AT DRUM POINT ROAD SCHOOL, DRUM POINT ROAD, BRICK, NEW JERSEY, prepared by YEZZI ASSOCIATES, ARCHITECTS & PLANNERS, 1035 HOOPER AVENUE, TOMS RIVER, NEW JERSEY 08753, as well as the Advertisement for Bids, and will contract to furnish and deliver and install all the material, labor, equipment, and appurtenances required for full and complete project as set forth in the Contract Documents for the following amount:

BASE BID.....(Total)

DOLLARS (\$.....)

COST BREAKDOWN: The Base Bid shall be broken down by the Contractor into the following categories for the Owner's edification:

Unit prices as indicated in section 1.10:

1. Deck replacement.....\$/s.f.
2. Deck repair.....\$/s.f.
3. Lowering drains.....drain/\$
4. Drain flashing collar.....collar/\$
5. Drain repair.....drain/\$
6. Wood blocking replacement.....linear ft./\$
7. Wood blocking replacement.....board ft/\$
8. Unit removal including deck installation
to close opening.....unit/\$

OWNERS ALTERNATES: Contractor is to include alternates in original bid. Each alternate is to be itemized individually for clarity. Owner has the right to select any individual alternate or number of alternates which meets the needs of the project.

REROOFING--DRUM POINT ROAD SCHOOL
BID PROPOSAL FORM

PAGE 2 OF 16
JUNE 30, 1993

The undersigned agrees, if awarded the Contract, to execute and deliver the Contract Agreement to the Owner within ten (10) days after notice of award. The project is to be unconditionally guaranteed for a period of one year from final C.O.

STARTING DATE: _____

COMPLETION DATE: _____ (BY GC)

CONTRACTOR: _____

COST: The undersigned hereby affirms and states that the prices quoted herein constitute the total cost for all work involved in the respective items and that the cost also includes all insurance, transportation charges, use of all tools and equipment, superintendence, bonus, overhead expenses, all profits and all other work, services, conditions furnished in accordance with the requirement of the contract documents considered severally and collectively.

Bid Security in the amount of \$_____ is enclosed.

Disclosure of Ownership Statement is enclosed.

See Check List Attached.

Other Provision: The undersigned hereby affirms and states that any modifications to the specifications are set forth on the following page forms a part of this bid.

The Owner reserves the right to reject any and all proposals and to waive any informalities in the bidding. The Bidder agrees that his proposal may not be withdrawn for a period of thirty (30) days from the opening thereof. Conditional proposals will not be accepted. Proposal Forms will not be accepted unless signed by the Owner or authorized Corporate Officer. The Owner reserves the right to accept or reject any and all of the alternates in any order he so desires.

PREBID MEETING: There will be a voluntary prebid meeting on June 23, 1993, to visit all sites. All those interested in attending said meeting should assemble at the Brick Township Board of Education Administrative Office, 101 Hendrickson Avenue, Brick, NJ 08724, at 9:30 a.m. on June 23, 1993.

REROOFING- DRUM POINT ROAD SCHOOL
BID PROPOSAL FORM

PAGE 3 OF 16
JUNE 30, 1993

NAME OF BIDDER: _____
(Typed or Printed)

SIGNED: _____
(Authorized Signature)

(Title of Person Signing)

ADDRESS: _____

ADDENDUMS: The Contractor shall list receipt of all Addendums on
their Bid Proposal Form:

Addendum No. _____	Date Received _____
Addendum No. _____	Date Received _____
Addendum No. _____	Date Received _____

THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and
(Here insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of
 as Surety, hereinafter called the Surety, are held and firmly bound unto
(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called the Obligee, in the sum of

Dollars (\$),

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for
(Here insert full name, address and description of project)

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____ 19____

_____	{	_____	(Principal)	(Seal)
(Witness)		_____	(Title)	

_____	{	_____	(Surety)	(Seal)
(Witness)		_____	(Title)	

PROVISIONS OF SECTION 4 of C. 127, PUBLIC LAW 1975

This is a paragraph from the New Jersey Administrative Code, Chapter 614 - 1.6, Employment/Contract Practices with which we must comply.

"No school district shall enter into any contract with a person, agency, or organization if it has any knowledge that such person, agency, or organization discriminates on the basis of race, color, creed, religion, sex, ancestry, national origin, or social or economic status, either in employment practices or in the provision of benefits or services to students or employees."

FURTHER DEFINED IN "INSTRUCTIONS TO BIDDERS", SECTION 36.

AFFIRMATIVE ACTION AFFIDAVIT

STATE OF NEW JERSEY

COUNTY OF

I, _____, of the (City, Town, Borough) of _____ in
the County of _____ State of _____ of full age, being duly
sworn according to law on my oath depose and say that:

1. I am (President, partner, owner) of the firm of _____
a bidder making a proposal upon the above-named project.

2. I am familiar with the affirmative action requirements of P L 1975, c, 127
and rules and regulations issued by the Treasurer, State of New Jersey, pursuant
thereto.

3. _____, has complied with all the affirmative action
requirements of the State of New Jersey, including those required by P L 1975, c,
127 and the rules and regulations issued by the Treasurer, State of New Jersey,
pursuant thereto.

4. I am aware that if, _____ does not comply with P L 1975, c,
127 and rules and regulations issued pursuant thereto, that no monies will be paid
by the State of New Jersey, County of OCEAN _____, (City, Town, Borough)
Brick Township
of Board of Education, until an affirmative action plan is approved. I am
also aware that the contract may be terminated and the
may be debarred from all public contracts, for a period of up to five (5) years.

5. The Affirmative Action Affidavit for vendors having less than fifty
employees is no longer acceptable.

Signature of Authorized Representative

(Seal, Notary Public of New Jersey)

Subscribed and sworn to

before me this _____ day

of _____, 19 _____

Name and Title

NOTICE TO CONTRACTORS

RE: AFFIRMATIVE ACTION REGULATIONS P.L. 1975, C 127

PROCUREMENT AND SERVICE CONTRACTORS

Contractors are required to comply with the requirements of P.L. 1975, C. 127

A. ALL CONTRACTORS

1. Within seven (7) days after receipt of the notification of intent to award the contract or receipt of the contract, whichever is sooner, a procurement contractor should present one of the following to the; Brick Township Board of Education, 101 Hendrickson Avenue, Brick, NJ 08724
 - (a) An existing federally approved or sanctioned affirmative action program.
 - (b) A Certificate of Employee Information Report Approval.
 - (c) If the contractor cannot present "a" or "b" the contractor is required to submit a completed Employees Information Report (Form AA302). This form will be made available to contractors by the Brick Township Board of Education.

The following questions must be answered by all prospective contractors

1. Do you have a federally approved or sanctioned Affirmative Action Program?

YES _____ NO _____

- (a) If yes, please submit a photostatic copy of such approval.

2. Do you have A State Certificate of Employee Information Report approval?

YES _____ NO _____

- (a) If yes, please submit a photostatic copy of such certificate.

SUBCONTRACTORS
REQUIRED INFORMATION

As per Local Public Contracts Law 40A:11-16:

There will be set forth in the bid the names or names of all subcontractors to whom the bidder will subcontract the furnishing of plumbing and gas fitting, and all kindred work, and of the steam and hot water heating and ventilating apparatus, steam power plants and kindred work, and electrical work, structural steel and ornamental iron work, each of which subcontractors shall be qualified in accordance with this act. The contracting unit shall require evidence of performance security to be submitted simultaneously with the list of subcontractors. Evidence of performance security may be supplied by the bidder on behalf of himself and any or all subcontractors, or by each respective subcontractor, or by any combination thereof which results in evidence of performance security equalling, but in no event exceeding, the total amount bid.

LIST OF SUBCONTRACTORS

Name

Address

Type of Work

[illegible]

NON-COLLUSION AFFIDAVIT

STATE OF NEW JERSEY :
COUNTY OF : SS.

I, _____ of the City of _____
in the County of _____ and the State
of New Jersey, of full age, being duly sworn according to law on my
oath depose and say that:

I am _____
of the firm of _____
the bidder making the Proposal for the above named project, and that I
executed the said Proposal with full authority so to do; that said
bidder has not, directly or indirectly, entered into an agreement,
participated in any collusion, or otherwise taken any action in re-
straint of free, competitive bidding in connection with the above
named project; and that all statements contained in said Proposal and
in this affidavit are true and correct, and made with full knowledge
that the Board of Education relies upon the truth of the statements con-
tained in said Proposal and in the statements contained in this affidavit
in awarding the contract for the said project.

Subscribed and sworn to
before me this _____ day
of _____, 19____

BY: _____

Notary Public State of _____
My commission expires _____, 19____

THE UNDERSIGNED, as bidder, in accordance with P.L. 1977, Chapter 33, declares and submits this Statement of Ownership:

Full Name of Individual (Stockholder) (Partner)	Address of Individual (Stockholder) (Partner)	Share (2) Owned
--	--	--------------------

[illegible]

Number of minority (less than 10%) owners not listed _____ .
TOTAL 100%

- Notes: 1. Attach additional sheets in this format if necessary.
2. If a corporation or partnership is shown as a greater than 10% owner, attach similar breakdown of (their) (its) individual owners.

CONSENT OF SURETY

In consideration of the premises and of One Dollar (\$1.00), lawful money of the United States, it is in hand paid by the CONTRACTOR, the receipt whereof is hereby acknowledged, the undersigned surety consents and agrees that if the contract, for which the preceding estimate and proposal is made, be awarded the person or persons submitting the same as contracted, it will become bound as surety and guarantor for its faithful performance, in an amount equal to one hundred percent (100%) of the contract price, and will execute it as party of the third part thereto when required to do so by the OWNER, and if the said CONTRACTOR shall omit or refuse to execute such contract, if so awarded, it will pay without proof of notice and on demand to the OWNER any increase between the sum to which the said CONTRACTOR would have been entitled upon the completion of the said contract and the sum which the said OWNER may be obligated to pay to another contractor to whom the contract may be afterwards awarded, the amount in such case to be determined by the bids plus the cost, if any, of readvertising for bids for this work, less the amount of any certified check or bid bond payable and received.

In witness whereof, said surety has caused these presents to be signed and attested by a duly authorized officer and its corporate seal to be hereto affixed this

_____ day of _____ 19____

(A corporate acknowledgement and statement of authority to be here attached by the surety company).

(Surety Company)

By _____

Surety Company
Attorney-in-Fact

Attest:

(Surety may substitute a similar statement subject to the Owner's approval.)



101 HENDRICKSON AVENUE
BRICK, N. J. 08724
DIAL (201) 477-2800

Brick Township Board of Education

Administrative Offices

Dear Sir:

The New Jersey Worker and Community Right to Know Act (N.J.S.A. 34:5A-1 et seq.), effective August 29, 1984, establishes a comprehensive system for the disclosure and dissemination of information about hazardous substances in the workplace and the environment.

Pursuant to the Act, the Department of Health has adopted a Workplace Hazardous Substance List (N.J.A.C. 8:59-9) which includes 2051 hazardous substances that pose a threat to the health and safety of employees. In the first year, the Act requires employers to label all containers with the names of all hazardous substances present in the container and to list them on a Workplace Survey. In the second year, I am required to label the top five ingredients plus any hazardous substances down to 0.1%.

In order to comply with the Worker and Community Right to Know Act, we are requiring that all vendors label their products in such a fashion that they meet the requirements set forth in the New Jersey Worker and Community Right to Know Act (N.J.S.A. 34:5A-1 et seq.). In addition, we are requiring that you provide us with the Material Safety Data Sheets (MSDS) or a complete list of all ingredients of the products shipped by you whether they be considered hazardous substances or not. Should you fail to comply with these requirements, all products shipped by you to the Brick Township School System will be returned at your expense.

At this time we also bring to your attention that in the event the MSDS does not accompany the shipment and we have to request it the following shall apply:

- A. No distribution of the product will be permitted in our school district.
- B. The shipment will be returned at your expense if we do not have the MSDS in our possession within 10 days after our contact with your company.

Full compliance with this requirement will be no later than July 1, 1986.

Should you have any questions regarding these requirements, please feel free to contact my office at 201-477-2800, extension 210.

Yours truly,

Robert K. Stutts
Business Administrator/
Board Secretary

RKS:lg

NOTICE TO ALL PUBLIC WORKS EMPLOYEESCERTIFIED PAYROLL RECORDS

PLEASE BE ADVISED that effective February 18, 1992 Regulation N.J.A.C. 12:60-2.1 and 6.1 of the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-55.25 et seq. requires that all public works employers shall submit a certified payroll record to the public body or lessor which contracted for the public work project each payroll period within ten (10) days of the payment of wages. The public body shall receive, file and make available for inspection during normal business hours the certified payroll records.

A copy of the certified payroll form may be obtained by contacting the New Jersey Department of Labor, Division of Workplace Standards, Public Contracts Section, CN 389, Trenton, N.J. 08625-0389, telephone (609) 292-2259.

I have read the above statement and am aware of my responsibilities:

Contractor:

Date:

Payroll on this project will be on a:

basis.

Weekly

Bi-Weekly

Monthly



State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF BUILDING & CONSTRUCTION
60 BARRACK STREET
CN-236
TRENTON, N.J. 08625



NOTICE OF CLASSIFICATION

OFFICE OF THE
DIRECTOR

TO:

TEL: (609) 833-3990
TEL: (609) 884-4708
FAX: 609-202-7851

NOTICE TYPE

AGGREGATE AMOUNT

TRADE(S)

EFFECTIVE DATE

EXPIRATION DATE

S A M P L E

ELECTRICAL LICENSE NO.

PLUMBING LICENSE NO.

OTHER LICENSE NO.

VALID ELECTRICAL LICENSE ON FILE DBO

VALID PLUMBING LICENSE ON FILE DDC

FIRM QUALIFIED FOR WIRING WITH A POTENTIAL OF 30 VOLTS OR LESS, NO LICENSE ON FILE

ELECTRICAL LICENSE NUMBER MUST BE VERIFIED AS VALID BEFORE AWARD OF CONTRACT

PLUMBING LICENSE NUMBER MUST BE VERIFIED AS VALID BEFORE AWARD OF CONTRACT.

IN accordance with N.J.S.A. 18A:18A-27 *et seq* (Department of Education) and N.J.S.A. 52:35-1 (Department of the Treasury) and any rules and regulations issued pursuant hereto, you are hereby notified of your classification to do State work in the Department(s) as noted above.

STATEMENT OF ROOFING MANUFACTURER'S QUALIFICATIONS

Each bidder for the work included in the specifications and drawings and the contract documents shall submit with their bid the data requested in the following schedule of information. This data must be included in and made part of each bid document and contained in the sealed envelope. Failure to comply with this instruction may be regarded as justification for rejecting the Contractor's Proposal. Submit one (1) copy of this statement.

1. Name of bidder_____
2. Name of Material Supplier_____
3. Number of years manufacturing this roof system_____
4. Location of wholly owned and operated manufacturing facilities.

Facility_____

Facility_____

Product_____

Product_____

Street_____

Street_____

City_____

City_____

State_____

State_____

% of product used
mfg at this plant_____% of product used
mfg at this plant_____

Facility_____

Facility_____

Product_____

Product_____

Street_____

Street_____

City_____

City_____

State_____

State_____

% of product used
mfg at this plant_____% of product used
mfg at this plant_____

5. Submit Material Safety Data Sheets on products to be used.
6. Submit current independent laboratory results on roofing system that is proposed, prior to award of contract.
7. The proposed roof system to be installed shall meet all local and state safety, health, fire and building code requirements.



AIA Document A701

Instructions to Bidders

1987 EDITION

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INSTRUCTIONS TO BIDDERS

ARTICLE 1 **DEFINITIONS**

1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

1.4 A Bid is a complete and properly signed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

1.8 A Bidder is a person or entity who submits a Bid.

1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

ARTICLE 2 **BIDDER'S REPRESENTATIONS**

2.1 The Bidder by making a Bid represents that:

2.1.1 The Bidder has read and understands the Bidding Documents and the Bid is made in accordance therewith.

2.1.2 The Bidder has read and understands the Bidding Documents or contract documents, to the extent that such documentation relates to the Work for which the Bid is submitted, for other portions of the Project, if any, being bid concurrently or presently under construction.

2.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and

has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

ARTICLE 3 **BIDDING DOCUMENTS**

3.1 COPIES

3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.

3.1.2 Bidding Documents will not be issued directly to Sub-bidders or others unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.

3.1.3 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

3.1.4 In making copies of the Bidding Documents available on the above terms, the Owner and the Architect do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant permission for any other use of the Bidding Documents.

3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

3.2.3 Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

3.3 SUBSTITUTIONS

3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function,

dimension, appearance and quality to be met by any proposed substitution.

3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

3.3.3 If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

3.3.4 No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.

3.4 ADDENDA

3.4.1 Addenda will be mailed or delivered to all who are known by the issuing office to have received a complete set of Bidding Documents.

3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

3.4.3 No Addenda will be issued later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

3.4.4 Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4

BIDDING PROCEDURES

4.1 FORM AND STYLE OF BIDS

4.1.1 Bids shall be submitted on forms identical to the form included with the Bidding Documents.

4.1.2 All blanks on the bid form shall be filled in by typewriter or manually in ink.

4.1.3 Where so indicated by the makeup of the bid form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.

4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."

4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture

of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.

4.1.7 Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, partnership, corporation or other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

4.2 BID SECURITY

4.2.1 If so stipulated in the Advertisement or Invitation to Bid, or supplementary instructions to bidders, each Bid shall be accompanied by a bid security in the form and amount required, pledging that the Bidder will enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Subparagraph 6.2.1.

4.2.2 If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) all Bids have been rejected.

4.3 SUBMISSION OF BIDS

4.3.1 All copies of the Bid, the bid security, if any, and other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

4.3.3 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

4.3.4 Oral, telephonic or telegraphic Bids are invalid and will not receive consideration.

4.4 MODIFICATION OR WITHDRAWAL OF BID

4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time

and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.

4.4.2 Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder or by telegram; if by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

4.4.3 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

4.4.4 Bid security, if required, shall be in an amount sufficient for the Bid as modified or resubmitted.

ARTICLE 5

CONSIDERATION OF BIDS

5.1 OPENING OF BIDS

5.1.1 Unless stated otherwise in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be opened publicly and will be read aloud. An abstract of the Bids will be made available to Bidders. When it has been stated that Bids will be opened privately, an abstract of the same information may, at the discretion of the Owner, be made available to the Bidders within a reasonable time.

5.2 REJECTION OF BIDS

5.2.1 The Owner shall have the right to reject any or all Bids, reject a Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or reject a Bid which is in any way incomplete or irregular.

5.3 ACCEPTANCE OF BID (AWARD)

5.3.1 It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

5.3.2 The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6

POST-BID INFORMATION

6.1 CONTRACTOR'S QUALIFICATION STATEMENT

6.1.1 Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously

required and submitted as a prerequisite to the issuance of Bidding Documents.

6.2 OWNER'S FINANCIAL CAPABILITY

6.2.1 The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

6.3 SUBMITTALS

6.3.1 The Bidder shall, as soon as practicable after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the manufacturers, products and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

6.3.2 The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

6.3.3 Prior to the award of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid, or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7

PERFORMANCE BOND AND PAYMENT BOND

7.1 BOND REQUIREMENTS

7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.

7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the

furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

7.1.3 If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

7.2 TIME OF DELIVERY AND FORM OF BONDS

7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Subparagraph 7.2.1.

7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

7.2.3 The bonds shall be dated on or after the date of the Contract.

7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

ARTICLE 8

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

8.1 FORM TO BE USED

8.1.1 Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.

ARTICLE 10

SUPPLEMENTARY INSTRUCTIONS TO BIDDER

1. This proposal covers the REROOFING work at the DRUM POINT ROAD ELEMENTARY SCHOOL, BRICK, NJ.
2. Each bid shall be upon the form bound with the specifications, shall be signed by the Bidder with his business address and shall be delivered together with the specifications to the place mentioned above, within the time specified. Each bid shall be submitted in an envelope addressed to the Brick Schools Board of Education, 101 Hendrickson Avenue, Brick, New Jersey 08724, showing the bidders name and clearly marked "REROOFING - DRUM POINT ROAD SCHOOL".
3. All bids shall be submitted on the Bid Forms attached to these specifications. The Bid Form shall be completely filled out. Bids that are incomplete, conditional, or obscure, or which contain any additions or alterations not called for, may be rejected.
4. The Bid must bear the written signature of the Bidder. If the Bidder is a partnership, the Bid must be signed by the partners. If the Bidder is a corporation, the Bid must be signed by a duly authorized officer or agent of such corporation. A sole owner must sign as such. An individual trading as a company must sign and indicate, trading as said company.
5. Bidders shall submit prices as indicated on the Bid Form. In lieu of statements to the contrary, it will be clearly understood that all prices shall be for items specified. Bidders will clearly state in a separate letter, any exception to the specifications as issued. The Owner reserves the right to rule on the equality of items bid on to those listed.
6. RECEIVING BIDS: Bids received prior to the time established for the receipt of Bids will be securely kept unopened. No responsibility will be attached to the awarding authority for premature opening of a Bid not properly addressed and identified. No Bid received by the Owner after the time established herein for the opening of Bids will be considered, regardless of the cause of delay in the receipt of any such Bid.
7. WITHDRAWAL OF BIDS: Any bid may be withdrawn on written request dispatched by the Bidder on time for delivery in the normal course of business prior to the hour fixed for the opening of Bids. During the 45 day period following the opening of bids, no Bidder may withdraw any proposal submitted by him.

8. No interpretation of the reading of the specifications or other contract documents will be made by the Architect orally. Every request for such interpretation shall be in writing, addressed to the Architect and, to be given consideration, must be received five (5) working days prior to bid due date. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda to the specifications which, if issued, will be mailed to all prospective bidders. Failure of any bidder to receive such addendum or interpretation shall not relieve any Bidder from any obligation under his bid submitted. All Addenda shall become a part of the General Contract.
9. Each bid shall be accompanied by certified check, cashiers' check or bid bond issued by a responsible bank or trust company, payable to the BRICK BOARD OF EDUCATION in the amount of 10% of the total bid amount, as a bid deposit. The bid deposit shall be forfeited as damages, if the Bidder fails to execute the contract and furnish bonds as specified below (#10) within ten (10) working days after notification of award of contract to him.
10. The Owner requires the successful Bidder furnish and pay for a Performance Bond in the value of 100% of the contract amount and within ten (10) working days after the award, as a condition of the execution of the agreement.
11. The Specifications, Instructions to Bidders, Designated Inspections, Manufacturer's Representative Responsibilities, Invitations to Bid, the Bid Form, and any addenda provisions together with the purchase order shall constitute the contract document.
12. The Brick Schools Board of Education, known as the Owner and Awarding Authority, reserves the right to reject any or all bids if deemed to be in the public interest to do so and to award the bid to their best advantage.
13. BIDS MUST INCLUDE A STATEMENT ON THE BID FORM TO THE EFFECT THAT THE BIDDER WILL COMPLETE ALL WORK CALLED FOR UNDER THIS CONTRACT NO LATER THAN AUGUST 28, 1993. WORK SHALL COMMENCE WITHIN FIVE (5) CALENDAR DAYS OF AWARD OF CONTRACT.
14. The Contractor shall take all required precautions to protect his equipment against damage, theft, deterioration on the site, and shall be responsible for his work and equipment until final acceptance by the Awarding Authority.
15. The Owner may order changes in the material or work in writing, the contract sum being adjusted accordingly. All charges for additional materials or work must be submitted in advance to the Architect for approval.

16. The Contractor agrees that the rate per hour and wages paid to employees used in the performance of this project shall not be less than the minimum prevailing rates of wages, as per Wage Law #N.J.S.A. 34:11-56, 25 et. seq.
17. No subletting of the award, nor assignment of monies due, or to become due shall be made without written consent of the Owner.
18. If an award of the Contract is made, it will be made within thirty (30) days after opening of the bids. If the Bidder selected as the contractor fails to perform his agreement to execute his contract in accordance with the terms of the bids, and if required, fails to furnish a Performance Bond within ten (10) working days after the award, an award shall be made to the next lowest Bidder who is eligible and responsible.
19. Examination of Conditions. All contractors may visit the site for the purpose of inspecting the job site and proper specification interpretation.
20. Whenever a particular make of material is shown or specified herein, such make of material shall be regarded as a standard. Any other make or material will be accepted which is equal to that specified in quality, performance, physical features, economy in operation, and suitability for the purpose intended.
21. A Bidder intending to furnish an alternate in place of the items(s) specified, must submit a sample of the material that he intends to furnish with his Bid, and the name of the alternate must be written on the Bid Form.
22. A Bidder offering "or equal" materials will be responsible for furnishing complete and acceptable data to the Owner as to performance under the laboratory tests in the attached bid forms, showing the direct test comparison between the two materials. The date or dates of the testing must also be shown.
23. If the above comparative test data is not available, the United States Testing Company, Inc. shall perform all tests and qualitative and quantitative analysis at the bidder's expense. Such data shall prove the equality or superiority of the alternate material, or shall be rejected.

24. If the results of the required test data as described above are not available at the time of awarding the contract, the contract will be awarded in good faith by the Owner, on the assumption that the alternate materials are equal to those specified. When the results of the testing are made available to the Owner, if they are not equal to those specified, the Owner reserves the following rights:
- A. Reduce the total bid amount by fifty (50) percent assuming full completion and satisfaction of all other specifications.
 - B. If the job is less than one-half completed, it must be completed with the materials specified, and the total bid shall be reduced by thirty (30) percent.
 - C. If the job is more than one-half completed, it shall be completed with the unequal materials, and the total bid reduced by fifty (50) percent.
25. During the installation of the materials, the contractor shall have the manufacturer's representative on the job site for the purpose of job site instruction.
26. The Contractor shall carry liability insurance covering the operation of trucks and automobiles and shall take out and maintain Public Liability and Property Damage Liability Insurance in not less than the following amounts.

BODILY INJURY

PROPERTY DAMAGE

Each Person	Each Occurrence	Each Accident	Each Occurrence
\$500,000	\$500,000	\$500,000	\$500,000

Evidence of the above insurance in the form of certificates shall be issued to the Owner prior to starting work. Certificates of insurance shall state that the owner will be notified in writing ten (10) days prior to cancellation of any insurance coverage.

27. All work shall be in accordance with the specifications. Non-compliance shall result in rejection of the bid or the stopping of the work.
28. The bidders shall include in their proposals all labor, materials, equipment, and services necessary or incidental to the completion of the work, and other pertinent work as herein described.
29. The Contractor shall be responsible for the condition of the buildings and shall at all times make adequate provision to protect adjacent work and materials. He shall replace or put in good condition anything damaged in carrying on the work, and keep the premises free of all unauthorized or objectionable persons. At the completion of the work, all surplus materials, equipment, and debris shall be removed from the premises.

30. The Contractor agrees to hold the Owner harmless in any and all liability of every nature and description which may be suffered through bodily injuries, including death of any persons, by reasons of negligence of the Contractor, his agents, employees, or his sub-contractors.
31. The contractor shall maintain, for the duration of the contract and for the protection of all employees engaged thereunder, Workmen's Compensation as required by the Labor Laws of the States, and all Municipal and Federal Liability Laws. Evidence of this protection shall be filed with the owner prior to starting work.
32. Contractor shall comply with all safety requirements, provide all protection and equipment as required by the Construction Safety Code of the State Department of Labor and Industry pursuant to law.
33. Contractor shall determine, with the Architect, prior to ordering materials, that location which will be suitable for delivery and storage of materials and equipment. This is dependent upon availability of space. All materials and equipment shall be kept in a secure area or removed from the job site when work is not actually in progress.
34. Upon job completion, a final inspection will be made by the Architect, the contractor, and a designated representative of the owner. No payment will be authorized for work done until such inspection has been made, and all work is found to have been performed in accordance with the specifications and to the satisfaction of the owner.
35. The periods covered by the guarantee shall commence with the date of making and acceptance of the final payment. The Contractor shall furnish material manufacturer's full warranties to the owner upon completion of all work.
36. Affirmative Action: The parties to this contract agree to incorporate into this contract the mandatory language of sub-section 3.4 (a) of the regulations promulgated by the Treasurer pursuant to PL 1975, Chapter 127 as amended and supplemented from time to time, and the contractor or sub-contractor agrees to comply fully with the terms, provisions and obligations of said sub-section 3.4 (a) provided that said subsection shall be applied subject to the terms of sub-section 3.4 (d) of said regulations.

The parties to this contract agree to incorporate into this contract the mandatory language of subsection 7.4 (a) and (b) of the regulations promulgated by the Treasurer pursuant to PL 1975, Chapter 127 as amended and supplemented from time to time, and the contractor or sub-contractor agrees to comply fully with the terms, provisions and obligations of subsections 7.4 (a) and (b).

37. Disclosure of Ownership: Pursuant to the requirements of Chapter 33, PL 1977, effective March 8, 1977,

"No corporation or partnership shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies, the cost of which is to be paid with or out of any public funds, by the State, or any county, municipality or school district or any subsidiary or agency of the State, or any county, municipality or school district or by any authority, board, or commission which exercised governmental functions, unless prior to the receipt of the bid or accompanying the bid, of said corporation or said partnership, there is submitted a statement setting forth the names and addresses of all stockholders in the corporation or partnership who own 10% or more of its stock, of any class or of all individual partners in the partnership who own a 10% or greater interest therein, as the case may be.

If one or more such stockholder or partner is itself a corporation or partnership, the stockholders holding 10% or more of that corporation's stock, or the individual partners owning 10% or greater interest in that partnership, as the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, exceeding the 10% ownership criteria established in this act, has been listed."

Bidder shall submit with his bid a statement or list complying with the above law.

38. PREQUALIFICATION: Pursuant to the Requirements of Chapter 114, PL 1977, effective June 2, 1977,

18A:18A-26.

Every board of education shall require that all persons proposing to bid on any contract requiring public advertisement for bids with the board for public work, the entire cost whereof will exceed \$20,000.00, shall first be classified in accordance with article 6 of this chapter as to the character and amount of public work on which they shall be qualified to submit bids. So long as such requirement is in effect, the board of education shall accept such bids only from persons qualified in accordance with such classification.

18A:18A-32.

No person shall be qualified to bid on any public work contract with the board of education, the entire cost whereof will exceed \$20,000.00, who shall not have submitted a statement as required by N.J.S. 18A:18A-28 within a period of 6 months preceding the date of opening of bids for such contract. Every bidder shall submit with his bid an affidavit that subsequent to the latest such statement submitted by him there has been no material adverse change in his qualification information except as set forth in said affidavit.

Each bidder, if his bid exceeds \$20,000.00, shall submit with his bid an affidavit showing prequalification in accordance with the standards and by the New Jersey Department of Treasury, Division of Building and Construction, or the New Jersey Department of Transportation. The prequalification standards are accepted by the Department of Education as meeting the minimum requirements of prequalification for bidders on public school contracts. Each bidder shall therefore attach to his bid the affidavit form of prequalification certification of either of the above two referenced State Agencies which is active on the date of the acceptance of these bids.

39. MANUFACTURER'S REPRESENTATIVE'S RESPONSIBILITIES:

- A. Keeping the Architect informed on a periodic basis as to the progress and quality of work.
- B. Calling to the attention of the contractor those matters which he considers to be in violation of the contract requirements.
- C. Reporting to the Architect any failure or refusal of the contractor to correct unacceptable practices.
- D. Conducting preliminary and subsequent job site meetings with the contractor's official job representative.
- E. Rendering any other inspection services, which the Architect may designate.
- F. Inspecting after completion of work, the extent to which the contractor has complied with these specifications.

The presence and activities of the Architect shall in no way relieve the contractor of his contractual responsibilities.

END OF SECTION



AIA Document A201

General Conditions of the Contract for Construction

*THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES; CONSULTATION
WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS MODIFICATION*

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Waiver of Claims by the Contractor	9.10.4, 11.3.7, 13.4.2
Waiver of Claims by the Owner	4.3.5, 4.5.1, 9.9.3, 9.10.3, 11.3.3, 11.3.5, 11.3.7, 13.4.2
Waiver of Liens	9.10.2
Waivers of Subrogation	6.1.1, 11.3.5, 11.3.7
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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

ARTICLE 1

GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include other documents such as bidding requirements (advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or portions of addenda relating to bidding requirements).

1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and Contractor, (2) between the Owner and a Subcontractor or Sub-subcontractor or (3) between any persons or entities other than the Owner and Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

1.1.3 THE WORK

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

1.1.5 THE DRAWINGS

The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

1.1.6 THE SPECIFICATIONS

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equip-

ment, construction systems, standards and workmanship for the Work, and performance of related services.

1.1.7 THE PROJECT MANUAL

The Project Manual is the volume usually assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 The Contract Documents shall be signed by the Owner and Contractor as provided in the Agreement. If either the Owner or Contractor or both do not sign all the Contract Documents, the Architect shall identify such unsigned Documents upon request.

1.2.2 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.

1.2.4 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

1.2.5 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

1.3 OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

1.3.1 The Drawings, Specifications and other documents prepared by the Architect are instruments of the Architect's service through which the Work to be executed by the Contractor is described. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other documents prepared by the Architect, and unless otherwise indicated the Architect shall be deemed the author of them and will retain all common law, statutory and other reserved rights, in addition to the copyright. All copies of them, except the Contractor's record set, shall be returned or suitably accounted for to the Architect, on request, upon completion of the Work. The Drawings, Specifications and other documents prepared by the Architect, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the

Work without the specific written consent of the Owner and Architect. The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Architect appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this license shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Architect. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect's copyright or other reserved rights.

1.4 CAPITALIZATION

1.4.1 Terms capitalized in these General Conditions include those which are (1) specifically defined, (2) the titles of numbered articles and identified references to Paragraphs, Subparagraphs and Clauses in the document or (3) the titles of other documents published by the American Institute of Architects.

1.5 INTERPRETATION

1.5.1 In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

ARTICLE 2

OWNER

2.1 DEFINITION

2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representative.

2.1.2 The Owner upon reasonable written request shall furnish to the Contractor in writing information which is necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein at the time of execution of the Agreement and, within five days after any change, information of such change in title, recorded or unrecorded.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.2.1 The Owner shall, at the request of the Contractor, prior to execution of the Agreement and promptly from time to time thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. *[Note: Unless such reasonable evidence were furnished on request prior to the execution of the Agreement, the prospective contractor would not be required to execute the Agreement or to commence the Work.]*

2.2.2 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.

2.2.3 Except for permits and fees which are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, assess-

ments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

2.2.4 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in orderly progress of the Work.

2.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work.

2.2.6 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Article 6 (Construction by Owner or by Separate Contractors), Article 9 (Payments and Completion) and Article 11 (Insurance and Bonds).

2.3 OWNER'S RIGHT TO STOP THE WORK

2.3.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Paragraph 12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner, by written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph 6.1.3.

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Contractor a second written notice to correct such deficiencies within a second seven-day period. If the Contractor within such second seven-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's additional services and expenses made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3

CONTRACTOR

3.1 DEFINITION

3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative.

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

3.2.1 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner pursuant to Subparagraph 2.2.2 and shall at once report to the Architect errors, inconsistencies or omissions discovered. The Contractor shall not be liable to the Owner or Architect for damage resulting from errors, inconsistencies or omissions in the Contract Documents unless the Contractor recognized such error, inconsistency or omission and knowingly failed to report it to the Architect. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without such notice to the Architect, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

3.2.2 The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Architect at once.

3.2.3 The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Paragraph 3.12.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters.

3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor.

3.3.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

3.3.4 The Contractor shall be responsible for inspection of portions of Work already performed under this Contract to determine that such portions are in proper condition to receive subsequent Work.

3.4 LABOR AND MATERIALS

3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

3.5 WARRANTY

3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.6 TAXES

3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

3.7 PERMITS, FEES AND NOTICES

3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received or negotiations concluded.

3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities bearing on performance of the Work.

3.7.3 It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Architect and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

3.7.4 If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect and Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

3.8 ALLOWANCES

3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.

3.8.2 Unless otherwise provided in the Contract Documents:

1. materials and equipment under an allowance shall be selected promptly by the Owner to avoid delay in the Work;
2. allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;

- 3 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowances;
- 4 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Clause 3.8.2.2 and (2) changes in Contractor's costs under Clause 3.8.2.3.

3.9 SUPERINTENDENT

3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

3.10.2 The Contractor shall prepare and keep current, for the Architect's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Architect reasonable time to review submittals.

3.10.3 The Contractor shall conform to the most recent schedules.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

3.11.1 The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, addenda, Change Orders and other Modifications, in good order and marked currently to record changes and selections made during construction, and in addition approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

3.12.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for

which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Architect is subject to the limitations of Subparagraph 4.2.7.

3.12.5 The Contractor shall review, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals made by the Contractor which are not required by the Contract Documents may be returned without action.

3.12.6 The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect. Such Work shall be in accordance with approved submittals.

3.12.7 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

3.12.8 The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals.

3.12.10 Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents.

3.12.11 When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

3.13 USE OF SITE

3.13.1 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 materials or equipment.

3.14 CUTTING AND PATCHING

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

3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the

Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

3.15 CLEANING UP

3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials.

3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

3.16 ACCESS TO WORK

3.16.1 The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.

3.17 ROYALTIES AND PATENTS

3.17.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

3.18 INDEMNIFICATION

3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph 3.18.

3.18.2 In claims against any person or entity indemnified under this Paragraph 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Paragraph 3.18 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

3.18.3 The obligations of the Contractor under this Paragraph 3.18 shall not extend to the liability of the Architect, the Archi-

tect's consultants, and agents and employees of any of them arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, the Architect's consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage.

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

4.1.1 The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.

4.1.2 Duties, responsibilities and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Contractor and Architect. Consent shall not be unreasonably withheld.

4.1.3 In case of termination of employment of the Architect, the Owner shall appoint an architect against whom the Contractor makes no reasonable objection and whose status under the Contract Documents shall be that of the former architect.

4.1.4 Disputes arising under Subparagraphs 4.1.2 and 4.1.3 shall be subject to arbitration.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents, and will be the Owner's representative (1) during construction, (2) until final payment is due and (3) with the Owner's concurrence, from time to time during the correction period described in Paragraph 12.2. The Architect will advise and consult with the Owner. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with other provisions of the Contract.

4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check quality or quantity of the Work. On the basis of on-site observations as an architect, the Architect will keep the Owner informed of progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work.

4.2.3 The Architect will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility as provided in Paragraph 3.3. The Architect will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Con-

tractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

4.2.4 Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate through the Architect. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

4.2.5 Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

4.2.6 The Architect will have authority to reject Work which does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable for implementation of the intent of the Contract Documents, the Architect will have authority to require additional inspection or testing of the Work in accordance with Subparagraphs 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.7 The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate contractors, while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Paragraphs 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Paragraph 7.4.

4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, will receive and forward to the Owner for the Owner's review and records written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents.

4.2.10 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying

out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

4.2.11 The Architect will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made with reasonable promptness and within any time limits agreed upon. If no agreement is made concerning the time within which interpretations required of the Architect shall be furnished in compliance with this Paragraph 4.2, then delay shall not be recognized on account of failure by the Architect to furnish such interpretations until 15 days after written request is made for them.

4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions so rendered in good faith.

4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

4.3 CLAIMS AND DISPUTES

4.3.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Claims must be made by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

4.3.2 Decision of Architect. Claims, including those alleging an error or omission by the Architect, shall be referred initially to the Architect for action as provided in Paragraph 4.4. A decision by the Architect, as provided in Subparagraph 4.4.4, shall be required as a condition precedent to arbitration or litigation of a Claim between the Contractor and Owner as to all such matters arising prior to the date final payment is due, regardless of (1) whether such matters relate to execution and progress of the Work or (2) the extent to which the Work has been completed. The decision by the Architect in response to a Claim shall not be a condition precedent to arbitration or litigation in the event (1) the position of Architect is vacant, (2) the Architect has not received evidence or has failed to render a decision within agreed time limits, (3) the Architect has failed to take action required under Subparagraph 4.4.4 within 30 days after the Claim is made, (4) 45 days have passed after the Claim has been referred to the Architect or (5) the Claim relates to a mechanic's lien.

4.3.3 Time Limits on Claims. Claims by either party must be made within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be made by written notice. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered unless submitted in a timely manner.

4.3.4 Continuing Contract Performance. Pending final resolution of a Claim including arbitration, unless otherwise agreed in writing the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

4.3.5 Waiver of Claims: Final Payment. The making of final payment shall constitute a waiver of Claims by the Owner except those arising from:

1. liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
2. failure of the Work to comply with the requirements of the Contract Documents; or
3. terms of special warranties required by the Contract Documents.

4.3.6 Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Architect has given notice of the decision. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect for initial determination, subject to further proceedings pursuant to Paragraph 4.4.

4.3.7 Claims for Additional Cost. If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice, as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph 10.3. If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Architect, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Architect, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension or (7) other reasonable grounds, Claim shall be filed in accordance with the procedure established herein.

4.3.8 Claims for Additional Time

4.3.8.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

4.3.8.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data

substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

4.3.9 Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be filed as provided in Subparagraphs 4.3.7 or 4.3.8.

4.4 RESOLUTION OF CLAIMS AND DISPUTES

4.4.1 The Architect will review Claims and take one or more of the following preliminary actions within ten days of receipt of a Claim: (1) request additional supporting data from the claimant, (2) submit a schedule to the parties indicating when the Architect expects to take action, (3) reject the Claim in whole or in part, stating reasons for rejection, (4) recommend approval of the Claim by the other party or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

4.4.2 If a Claim has been resolved, the Architect will prepare or obtain appropriate documentation.

4.4.3 If a Claim has not been resolved, the party making the Claim shall, within ten days after the Architect's preliminary response, take one or more of the following actions: (1) submit additional supporting data requested by the Architect, (2) modify the initial Claim or (3) notify the Architect that the initial Claim stands.

4.4.4 If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Architect, the Architect will notify the parties in writing that the Architect's decision will be made within seven days, which decision shall be final and binding on the parties but subject to arbitration. Upon expiration of such time period, the Architect will render to the parties the Architect's written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Architect may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

4.5 ARBITRATION

4.5.1 Controversies and Claims Subject to Arbitration. Any controversy or Claim arising out of or related to the Contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof, except controversies or Claims relating to aesthetic effect and except those waived as provided for in Subparagraph 4.3.5. Such controversies or Claims upon which the Architect has given notice and rendered a decision as provided in Subparagraph 4.4.4 shall be subject to arbitration upon written demand of either party. Arbitration may be commenced when 45 days have passed after a Claim has been referred to the Architect as provided in Paragraph 4.3 and no decision has been rendered.

4.5.2 Rules and Notices for Arbitration. Claims between the Owner and Contractor not resolved under Paragraph 4.4 shall, if subject to arbitration under Subparagraph 4.5.1, be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect, unless the parties mutually agree otherwise. Notice of demand for arbitration shall be filed in writing with the other party to the Agreement between the Owner and Contractor and with the American Arbitration Association, and a copy shall be filed with the Architect.

4.5.3 Contract Performance During Arbitration. During arbitration proceedings, the Owner and Contractor shall comply with Subparagraph 4.3.4.

4.5.4 When Arbitration May Be Demanded. Demand for arbitration of any Claim may not be made until the earlier of (1) the date on which the Architect has rendered a final written decision on the Claim, (2) the tenth day after the parties have presented evidence to the Architect or have been given reasonable opportunity to do so, if the Architect has not rendered a final written decision by that date, or (3) any of the five events described in Subparagraph 4.3.2.

4.5.4.1 When a written decision of the Architect states that (1) the decision is final but subject to arbitration and (2) a demand for arbitration of a Claim covered by such decision must be made within 30 days after the date on which the party making the demand receives the final written decision, then failure to demand arbitration within said 30 days' period shall result in the Architect's decision becoming final and binding upon the Owner and Contractor. If the Architect renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence, but shall not supersede arbitration proceedings unless the decision is acceptable to all parties concerned.

4.5.4.2 A demand for arbitration shall be made within the time limits specified in Subparagraphs 4.5.1 and 4.5.4 and Clause 4.5.4.1 as applicable, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to Paragraph 13.7.

4.5.5 Limitation on Consolidation or Joinder. No arbitration arising out of or relating to the Contract Documents shall include, by consolidation or joinder or in any other manner, the Architect, the Architect's employees or consultants, except by written consent containing specific reference to the Agreement and signed by the Architect, Owner, Contractor and any other person or entity sought to be joined. No arbitration shall include, by consolidation or joinder or in any other manner, parties other than the Owner, Contractor, a separate contractor as described in Article 6 and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the Owner, Contractor or a separate contractor as described in Article 6 shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a dispute not described therein or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

4.5.6 Claims and Timely Assertion of Claims. A party who files a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. When a party fails to include a Claim through oversight, inadvertence or excusable neglect, or when a Claim has matured or been acquired subsequently, the arbitrator or arbitrators may permit amendment.

4.5.7 Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE 5

SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection.

5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. The Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued. However, no increase in the Contract Sum shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

5.2.4 The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such change.

5.3 SUBCONTRACTUAL RELATIONS

5.3.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that:

1. assignment is effective only after termination of the Contract by the Owner for cause pursuant to Paragraph 1.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and
2. assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

5.4.2 If the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted.

ARTICLE 6

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided elsewhere in the Contract Documents.

6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

6.2 MUTUAL RESPONSIBILITY

6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

6.2.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefor.

6.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors as provided in Subparagraph 10.2.5.

6.2.5 Claims and other disputes and matters in question between the Contractor and a separate contractor shall be subject to the provisions of Paragraph 4.3 provided the separate contractor has reciprocal obligations.

6.2.6 The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Paragraph 3.14.

6.3 OWNER'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Paragraph 3.15, the Owner may clean up and allocate the cost among those responsible as the Architect determines to be just.

ARTICLE 7

CHANGES IN THE WORK

7.1 CHANGES

7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.

7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

7.1.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are so changed in a proposed Change Order or Construction Change Directive that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

7.2 CHANGE ORDERS

7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor and Architect, stating their agreement upon all of the following:

- 1 a change in the Work;
- 2 the amount of the adjustment in the Contract Sum, if any; and
- 3 the extent of the adjustment in the Contract Time, if any.

7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in Subparagraph 7.3.3.

7.3 CONSTRUCTION CHANGE DIRECTIVES

7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- 1 mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- 2 unit prices stated in the Contract Documents or subsequently agreed upon;

3 cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or

4 as provided in Subparagraph 7.3.6.

7.3.4 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

7.3.5 A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

7.3.6 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Architect on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Subparagraph 7.3.6 shall be limited to the following:

- 1 costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' or workmen's compensation insurance;
- 2 costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- 3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- 4 costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- 5 additional costs of supervision and field office personnel directly attributable to the change.

7.3.7 Pending final determination of cost to the Owner, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

7.3.8 If the Owner and Contractor do not agree with the adjustment in Contract Time or the method for determining it, the adjustment or the method shall be referred to the Architect for determination.

7.3.9 When the Owner and Contractor agree with the determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

7.4 MINOR CHANGES IN THE WORK

7.4.1 The Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

ARTICLE 8

TIME

8.1 DEFINITIONS

8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

8.1.2 The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Paragraph 9.8.

8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

8.2 PROGRESS AND COMPLETION

8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.

8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 If the Contractor is delayed at any time in progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Paragraph 15.3.

8.3.3 This Paragraph 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for elsewhere in the Contract Documents.

9.3.1.1 Such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives but not yet included in Change Orders.

9.3.1.2 Such applications may not include requests for payment of amounts the Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.

9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the

Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Subparagraph 9.5.1.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's observations at the site and the data comprising the Application for Payment, that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information and belief, quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

9.5.1 The Architect may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Subparagraph 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Subparagraph 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss because of:

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or another contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 persistent failure to carry out the Work in accordance with the Contract Documents.

9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

9.6 PROGRESS PAYMENTS

9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

9.6.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.

9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

9.6.4 Neither the Owner nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

9.6.5 Payment to material suppliers shall be treated in a manner similar to that provided in Subparagraphs 9.6.2, 9.6.3 and 9.6.4.

9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

9.7 FAILURE OF PAYMENT

9.7.1 If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Architect or awarded by arbitration, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which shall be accomplished as provided in Article 7.

9.8 SUBSTANTIAL COMPLETION

9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or design-

nated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. The Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion. When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate.

9.8.3 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof as provided in the Contract Documents.

9.9 PARTIAL OCCUPANCY OR USE

9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Subparagraph 11.3.11 and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Subparagraph 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.10 FINAL COMPLETION AND FINAL PAYMENT

9.10.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make

such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Subparagraph 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims. The making of final payment shall constitute a waiver of claims by the Owner as provided in Subparagraph 4.3.5.

9.10.4 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment. Such waivers shall be in addition to the waiver described in Subparagraph 4.3.5.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

10.1.2 In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Architect in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it has been rendered harmless, by written agreement of the Owner and Contractor, or in accordance with final determination by the Architect on which arbitration has not been demanded, or by arbitration under Article 4.

10.1.3 The Contractor shall not be required pursuant to Article 7 to perform without consent any Work relating to asbestos or polychlorinated biphenyl (PCB).

10.1.4 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Architect, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Owner, anyone directly or indirectly employed by the Owner or anyone for whose acts the Owner may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Subparagraph 10.1.4.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

- 1 employees on the Work and other persons who may be affected thereby;
- 2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- 3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph 3.18.

10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

10.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

10.3 EMERGENCIES

10.3.1 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Paragraph 4.3 and Article 7.

ARTICLE 11

INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1 The Contractor shall purchase from and maintain* in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- 1 claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
4. claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person;
5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
6. claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
7. claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph 3.18.

11.1.2 The insurance required by Subparagraph 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

11.1.3 Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificates and the insurance policies required by this Paragraph 11.1 shall contain a provision that coverages afforded under the policies will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Subparagraph 9.10.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.

11.2 OWNER'S LIABILITY INSURANCE

11.2.1 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance. Optionally, the Owner may purchase and maintain other insurance for self-protection against claims which may arise from operations under the Contract. The Contractor shall not be responsible for purchasing and maintaining this optional Owner's liability insurance unless specifically required by the Contract Documents.

11.3 PROPERTY INSURANCE

11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance in the amount of the initial Contract Sum as well as subsequent modifications thereto for the entire Work at the site on a replacement cost basis without voluntary deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Paragraph 9.10 or until no person or entity

other than the Owner has an insurable interest in the property required by this Paragraph 11.3 to be covered, whichever is earlier. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

11.3.1.1 Property insurance shall be on an all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, false-work, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's services and expenses required as a result of such insured loss. Coverage for other perils shall not be required unless otherwise provided in the Contract Documents.

11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance which will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor, then the Owner shall bear all reasonable costs properly attributable thereto.

11.3.1.3 If the property insurance requires minimum deductibles and such deductibles are identified in the Contract Documents, the Contractor shall pay costs not covered because of such deductibles. If the Owner or insurer increases the required minimum deductibles above the amounts so identified or if the Owner elects to purchase this insurance with voluntary deductible amounts, the Owner shall be responsible for payment of the additional costs not covered because of such increased or voluntary deductibles. If deductibles are not identified in the Contract Documents, the Owner shall pay costs not covered because of deductibles.

11.3.1.4 Unless otherwise provided in the Contract Documents, this property insurance shall cover portions of the Work stored off the site after written approval of the Owner at the value established in the approval, and also portions of the Work in transit.

11.3.2 Boiler and Machinery Insurance. The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

11.3.3 Loss of Use Insurance. The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or for other special hazards be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

11.3.5 If during the Project construction period the Owner insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Subparagraph 11.3.7 for damages caused by fire or other perils covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Paragraph 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Contractor.

11.3.7 Waivers of Subrogation. The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Paragraph 11.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

11.3.8 A loss insured under Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Subparagraph 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

11.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or in accordance with an arbitration award in which case the procedure shall be as provided in Paragraph 4.5. If after such loss no other special agreement is made, replacement of damaged property shall be covered by appropriate Change Order.

11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection be made, arbitrators shall be chosen as provided in Paragraph 4.5. The Owner as fiduciary shall, in that case, make settlement with insurers in accordance with directions of such arbitrators. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

11.3.11 Partial occupancy or use in accordance with Paragraph 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

11.4 PERFORMANCE BOND AND PAYMENT BOND

11.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

ARTICLE 12

UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for the Architect's observation and be replaced at the Contractor's expense without change in the Contract Time.

12.1.2 If a portion of the Work has been covered which the Architect has not specifically requested to observe prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

12.2 CORRECTION OF WORK

12.2.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby.

12.2.2 If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date

for commencement of warranties established under Subparagraph 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This period of one year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation under this Subparagraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

12.2.3 The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

12.2.4 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Paragraph 2.4. If the Contractor does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the Architect, the Owner may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten days after written notice, the Owner may upon ten additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

12.2.5 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

12.2.6 Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the time period of one year as described in Subparagraph 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF NONCONFORMING WORK

12.3.1 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

13.1.1 The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS

13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

13.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

13.4.2 No action or failure to act by the Owner, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so the Architect may observe such procedures. The Owner shall bear costs of tests, inspections or approvals which do not become requirements until after bids are received or negotiations concluded.

13.5.2 If the Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Subparagraph 13.5.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so the Architect may observe such procedures.

The Owner shall bear such costs except as provided in Subparagraph 13.5.3.

13.5.3 If such procedures for testing, inspection or approval under Subparagraphs 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses.

13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

13.5.5 If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

13.6 INTEREST

13.6.1 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

13.7 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

13.7.1 As between the Owner and Contractor:

- 1 Before Substantial Completion.** As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
- 2 Between Substantial Completion and Final Certificate for Payment.** As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and
- 3 After Final Certificate for Payment.** As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any warranty provided under Paragraph 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph 12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.

ARTICLE 14

TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor, for any of the following reasons:

- 1** issuance of an order of a court or other public authority having jurisdiction;
- 2** an act of government, such as a declaration of national emergency, making material unavailable;
- 3** because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Subparagraph 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents;
- 4** if repeated suspensions, delays or interruptions by the Owner as described in Paragraph 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less; or
- 5** the Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Subparagraph 2.2.1.

14.1.2 If one of the above reasons exists, the Contractor may, upon seven additional days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages.

14.1.3 If the Work is stopped for a period of 60 days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Subparagraph 14.1.2.

14.2 TERMINATION BY THE OWNER FOR CAUSE

14.2.1 The Owner may terminate the Contract if the Contractor:

- 1** persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- 2** fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- 3** persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or
- 4** otherwise is guilty of substantial breach of a provision of the Contract Documents.

14.2.2 When any of the above reasons exist, the Owner, upon certification by the Architect that sufficient cause exists to jus-

tify such action, may without prejudice to any other rights or remedies of the Owner, and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 accept assignment of subcontracts pursuant to Paragraph 5.4; and
- .3 finish the Work by whatever reasonable method the Owner may deem expedient.

14.2.3 When the Owner terminates the Contract for one of the reasons stated in Subparagraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the

Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Architect, upon application, and this obligation for payment shall survive termination of the Contract.

14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

14.3.2 An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance, caused by suspension, delay or interruption. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

14.3.3 Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

SUPPLEMENTARY CONDITIONS FOR ALL CONTRACTORS

Note: The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction", AIA Document A201, 1987 edition. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

ARTICLE 1; CONTRACT DOCUMENTS

Paragraph 1.2 - Execution, Correlation, Intent and Interpretations -
Add the following subparagraphs:

1.2.6 Where the words "shown" or "shown on drawings" are used in the specifications, they shall be construed to mean "noted", "indicated", "scheduled", "detailed", or any other diagrammatic or written reference made on the drawings.

1.2.8 The use of the words "provide" or "provided" is intended to mean "furnish(ed)" and/or "connect(ed)", unless specifically indicated otherwise in the specifications.

1.2.9 Where the words "equal" or "equivalent" are used, each shall be construed to mean being same in value, measure, force, affect or significance and corresponding in position and function subject to the approval of the architect.

1.2.10 The terms "approved" or "approval" mean written approval of the architect.

1.2.11 The terms "specification" or "specifications" shall mean all matter contained in the bound volume so entitled and related documents thereto.

1.2.12 The terms "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of like import shall imply the direction, requirement, permission, order, designation or prescription of the architect and "approved", "acceptable", "satisfactory", and works of like import shall mean approved by or acceptable or satisfactory to the architect and "necessary", "reasonable", "proper", "correct", and words of like import shall mean necessary, reasonable, proper, or correct, in the judgement of the architect.

1.2.13 The term "work" as used herein refers to work normally done at the location of the project or to that done in shops remote from the site and includes all plant, labor, materials, supplies, equipment and other facilities and things necessary or proper for or incidental to the carrying out and completion of the terms of this contract.

1.1.1 THE CONTRACT DOCUMENTS

The following list of AIA Documents are part of the contract and should be provided by Contractor:

- A-101 Owner Contract Agreement Form
- A-201 General Conditions of the Contract for Construction (Provided in Specifications)
- A-305 Contractor's Qualification Statement
- A-310 Bid Bond
- A-311 Performance Bond and Labor and Material Payment Bond
- A-701 Instructions to Bidders
- G-702 Application and Certificate for Payment
- G-702 Continuation Sheet
- G-704 Certificate of Substantial Completion
- G-705 Certificate of Insurance
- G-706 Contractor's Affidavit of payment of Debts and Claims
- G-706A Contractor's Affidavit of release of Liens
- G-707 Consent of Surety Company to Final Payment
- G-805 List of Subcontractors

The above AIA forms are on file at the Architect's office.

1.1.5 PROJECT MANUAL

The Project Manual is the volume which includes the bidding requirements, sample forms and certain of the Contract Documents such as the Conditions of the Contract and the Specifications.

The Contractors will purchase copies of the contract drawings and copies of the specifications for the execution of work from the Architect's office at a cost of \$50.00 per set (1 set of drawings and 1 set of specifications). Contractors shall allow in their bids a sufficient sum to cover the cost of the documents which they will require.

ARTICLE 2 - OWNER

The owner as defined shall be the BRICK TOWNSHIP BOARD OF EDUCATION.

2.1 The Contractor will be furnished, free of charge four copies of drawings and project manuals. Additional sets will be furnished at the cost of reproduction, postage, and handling.

ARTICLE 3 - CONTRACTOR

1. Labor and Materials

2. The contractor shall also furnish, erect and remove when no longer necessary or when directed to do so, necessary scaffolding including ladders, protection, hoists and other temporary structures or equipment for construction of work and shall furnish, erect and remove necessary shoring and be responsible for the safety and strength of same.

3. All materials shall be of AMERICAN MANUFACTURE. Materials and workmanship shall, in every respect, be in accordance with the best modern practice and whenever the Contract drawings, specifications or directions of the Architect admit of a doubt as to what is permissible or fail to note the quality of any work, the interpretations which calls for the best quality work is to be followed. Materials installed as part of the permanent construction shall be new materials, except as may be otherwise herein specified/required.

4. Where several brands, makes or manufacturers are listed as "approved" each shall be regarded as the equivalent of each other. Where only one is specified with "or Equal" or "or equivalent", it shall be regarded merely as a standard. If the words "or equal" or "or equivalent" do not follow the specified products, it is intended that the product or products so specified are a criteria which serve the best interests of the Owner. If the Contractor desires to substitute a material not listed, he shall apply to the Architect, in writing, for approval and state credit or extra involved. He shall accompany his request with technical data and samples for the Architect's consideration. Where no brand name is specified, and material is referred to as "approved", it signified that the Architect must be consulted as to source from which the material will be secured and its quality. The Architect reserves the right to test and inspect any and all substitute materials to determine the quality, workmanship, operation and general suitability for the purpose intended. The costs of all tests and inspections shall be borne by the Contractor.

5. Not later than 5 days from the Contract Date, the Contractor shall provide a list showing the name of the manufacturer proposed to be used for each of the products identified in the General Requirements of the Specifications (Division 1) and, where applicable, the name of the installing Subcontractor.

6. The Architect will promptly reply in writing to the Contractor stating whether the Owner or the Architect, after due investigation, has reasonable objection to any such proposal. If adequate data on any proposed manufacturer or installer is not available, the Architect may state that action will be deferred until the Contractor provides further data. Failure of the owner or architect to reply promptly shall constitute notice of no reasonable objection. Failure to object to a manufacturer shall not constitute a waiver of any of the requirements of the Contract Documents, and all products furnished by the listed manufacturer must conform to such requirements.

7. After the Contract has been executed, the Owner and the Architect will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in the General Requirements of the Specifications (Division 1).

7.1 By making requests for substitutions based on the above, the Contractor:

- a. represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- b. represents that he will provide the same warranty for the substitution that he would for that specified;
- c. certifies that the cost data presented is complete and includes all related costs under this Contract but excludes costs under separate contracts, and excludes the Architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently become apparent; and
- d. will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete in all respects.

7.2 Material - all material shall be of American manufacture.

8.0 Progress Schedule

The Contractor shall submit to the Architect within 10 days of award of the Contract a complete and realistic time schedule of all trades to complete the project.

ARTICLE 4 - NO CHANGE

ARTICLE 5 - NO CHANGE

ARTICLE 6 - NO CHANGE

ARTICLE 7 - NO CHANGE

ARTICLE 8 - NO CHANGES

ARTICLE 9 - PAYMENTS

1.0 New Jersey Prevailing Wage Act Shall Govern

2.0 Progress Payments - Add the following subparagraphs:

2.1 Monthly payments are to be made on contract in an amount equal to 95% of the contract value as work is completed and material delivered and stored at the site. The remaining 5% will be paid after full completion and final acceptance of the work, upon submission by the Contractors of releases of lien by all Subcontractors, vendors and others involved. All punch list items must be fully completed before the final acceptance is made. Applications for payment shall be submitted on the 20th of each month covering work up to that date. Architect will check and submit applications for payment to the Owner before the 30th of the month submission is made. Payments will be made upon approval of vouchers submitted by the Contractor in accordance with the AIA Document G702 Application for Payment.

2.2 Neither the foregoing nor any provisions of the Contract Documents, nor any special guaranty time limit shall be held to limit the Contractor's liability for defects and/or omissions to less than the legal limit of liability in accordance with the law of the place of building or area of jurisdiction.

3.0 ACCIDENTS, INJURIES, DAMAGES

If it becomes necessary for the Contractor, either as principal or by agent or employee, to enter upon the premises or property of the Owner in order to construct, erect, inspect, make delivery or remove property hereunder, the Contractor hereby covenants and agrees to take, use, provide and make all proper, necessary and sufficient precautions, safeguards and protections against the occurrence of happenings of any accidents, injuries, damages or hurt to any person or property during the progress of the work herein covered, and to be responsible for, and to indemnify and save harmless the Owner from the payment of all sums of money by reason of all, or any, such accidents, injuries, damages or hurt that may happen or occur upon or about such work and all fines, penalties and loss incurred for or by reason of the violation of any governmental ordinance, regulation, or the laws of the State, or the United States, while said work is in progress.

Contractor will carry insurance to indemnify the Owner against any claim for loss, damage or injury to property or persons arising out of the performance of the Contractor or his employees and agents of the services covered by the contract and the use, misuse or failure of any equipment used by the Contractor or his employees or agents, and shall provide certificates of such insurance to the Owner.

4.0 PROTECTION OF WORK AND PROPERTY

The Contractor shall continuously maintain adequate protection for all his work from damage and he shall protect the owner's property from injury, damage or loss arising in connection with this contract. He shall make good any such injury, damage or loss.

5.0 The occupancy or use of any portion of the project shall not constitute any acceptance of work performed in accordance with the contract documents or relieve the Contractor of liability to perform any work required by the contract but not completed at the time of said occupancy.

6.0 The Contractor shall be relieved of all maintenance costs on the portion of the project occupied under this section.

7.0 AFFIRMATIVE ACTION REQUIREMENTS

As required by the State of New Jersey

8.0 SUBSTITUTION OF MATERIAL

8.1 Whenever a particular make of material or manufacturer is shown or specified, such make of material or manufacturer shall be regarded as a standard. Any other make of material or manufacturer will be accepted which is comparable to that specified in cost, quality, workmanship, economy in operation and suitability for the purpose intended. If two or more makes of materials or manufacturers are specified, then each should be regarded as equal to the other and either one of them may be installed.

8.2 The Architect shall decide the question of equality whenever materials, equipment or manufacturers are referred to as in the specifications as "or equal". The Contractor shall submit for approval the name of the manufacturer and his product he contemplates installing together with pertinent information. If necessary, special guarantees shall be furnished upon request.

9.0 PROJECT COMPLETION

9.1 After the final punch list is sent to the Contractor, he shall complete all work within thirty (30) calendar days from the date of the list. This shall include all unfinished work, testing, adjusting, balancing and regulating all systems; providing all test reports instructions to Owner; maintenance manuals; certificates of approval and completion of all required forms.

9.2 If the contractor, through neglect, inability or incapacity to coordinate his subcontractors, manufacturers, or other under his control fails to complete this work satisfactorily in (30) days, he shall be given notice and the work shall be completed by others and the cost deducted from this Contractor's payment. Neither the Architect nor any of his Engineers or Consultants shall be responsible for completing the Contractor's work. Any additional time spent by the Architect, the Engineers or other consultants, or their duly authorized representative, in field trips, testing, measuring or calculating for corrections, changes or adjustments necessary for satisfactory system performance shall be charged seventy-five dollars (\$75.00) per hour including travel time.

ARTICLE 11 - INSURANCE

Contractor's Liability Insurance - add the following subparagraphs:

11.2 The Contractor's Liability Insurance and Contractor's Contingent Liability Insurance shall be in amounts of not less than the following or greater if required by law:

The Contractor and all Subcontractors, at their own expense, shall provide and maintain insurance as follows in companies acceptable to the Owner:

1. Workman's Compension as required by all applicable Federal, State, Maritime or other laws including Employer's Liability with a limit of at least: \$100,000.00

2. Comprehensive General Liability including Contractors Liability, Completed Operations and Products Liability all on the occurrence basis with Personal Injury Coverage and broad form Property Damage. Remove the XCU exclusion relating to Explosion, Collapse and Underground Property Damage. Completed Operations Liability shall be kept in force for at least two years after the date of final completion.

PERSONAL INJURY

Each Person	\$500,000.00
Each Occurrence	\$500,000.00

PROPERTY DAMAGE

Each Accident	\$500,000.00
Aggregate	\$500,000.00

3. Comprehensive Automobile Liability including non-ownership and hired car coverage as well as owned vehicles:

BODILY INJURY

Each Person	\$500,000.00
Each Occurrence	\$500,000.00

PROPERTY DAMAGE

Each Occurrence	\$500,000.00
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4. Bonds or Other Insurance which we require the Contractor to provide are:

Performance Bond, AIA Document A311 - 100% of contract amount
 Labor and Material Payment Bond, AIA Document A311 - 100% of contract amount.

The Contractor shall furnish the owner with satisfactory evidence of the required insurance and bonds with a provision that at least fifteen days prior written notice will be given to the Owner in the event of cancellation or material change.

Owner's Liability Insurance - The Owner shall provide the following insurance coverage:

1. Owner's Contingent Liability

PERSONAL INJURY

Each Person	\$500,000.00
Each Occurrence	\$500,000.00

PROPERTY DAMAGE

Each Occurrence	\$500,000.00
Aggragate	\$500,000.00

2. Builder's Risk - Fire, Extended Coverage and Vandalism insurance on the completed value form for the full insurable value of the work in the names of the Owner, the Contractor and all Subcontractors as their interests may appear - 100% of the contract assumed value.

3. Steam Boiler and Machinery - Not Required.

12.0 PAYMENTS FOR ADDITIONAL SERICES

12.1 The allowance for additional services, overhead and profit included in the total cost to the Owner, shall be based on the following schedule:

12.2 For the Contractor, for any Work performed by the Contractor's own forces, 10% of the cost.

12.3 For the Contractor, for work performed by his subcontractor, 5% of the amount due the Subcontractor.

12.4 For each Subcontractor or Sub-subcontractor involved, for any Work performed by that Contractor's own forces, 10% of the cost.

12.5 For each Subcontractor, for Work performed by his Sub-subcontractors, 10% of the amount due the Sub-subcontractor.

12.6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$100 be approved without itemization.

13.0 LAYOUT OF WORK

13.1 Each contractor shall take his own measurements at the site verifying same with the drawings and with the construction in progress, and will be held responsible for the proper fit of completed work in position.

14.0 TEMPORARY FACILITIES

14.1 TOOLS AND SCAFFOLDING - All manner of scaffolding and tools required for the proper execution of work shall be provided by each contractor, who shall maintain all in good working order and be responsible for the safety, use, maintenance, and care of same.

14.2 STORAGE SHEDS - All contractors shall provide sufficient storage sheds for materials requiring shelter from the weather and locate same to make the best use of the space available on the property. Upon completion of the contract work all temporary field structures shall be taken down and the site restored to the satisfaction of the architect.

15.0 STORAGE AREAS - All construction sheds and material storage shall be confined within fenced areas. The Architect shall determine areas to be used for materials and shed. General Contractor shall provide and erect a 4'0" high snow fence around perimeter of material storage shed areas as directed by the Architect and maintain its repair during entire construction contract.

16.0 TEMPORARY TOILET - The contractor shall provide and maintain sanitary temporary toilet at the site, located as directed, for use by those engaged in the work. Enclose and waterproof this temporary toilet; keep in constant sanitary approved condition. Remove from site and clean up when directed by owner or architect. No interior toilet facilities in building shall be used during any point of construction.

17.0 TEMPORARY WATER - The contractor shall make all necessary provision for water required for construction for all trades as outlined in the specifications. All contractors bidding on this project shall fully acquaint themselves with the requirements listed therein. The General Contractor shall pay for all water used.

18.0 COOPERATION AND MUTUAL RESPONSIBILITY OF CONTRACTORS

18.1 Contractors are required to cooperate fully with each other in the manufacturing, assembling and erection of the work in order to avoid delay and to insure first class workmanship. Where the work of one contractor requires the installation of work by another, ample advance notice shall be given to such other contractor and sufficient time allowed for the installation of his work. No closing in or covering up will be permitted until all work has been completed and inspected.

18.2 If, through acts of neglect on the part of one contractor, any other contractor or subcontractor shall suffer loss or damage of the work, the contractor causing the loss or damage agrees to settle with such other contractor or subcontractor by agreement or arbitration if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the owner on account of any damage alleged to have been sustained, the owner shall notify the contractor, who shall indemnify and save harmless the owner against any such claim.

19.0 GUARANTEE - Neither the final certificate of payment nor any provision in the contract documents, nor partial or entire use of the premises by the owner, shall constitute an acceptance of work not done in accordance with the contract documents. The contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of final acceptance. Should additional bonds or guarantees to be required under any division of the specifications, such bonds and guarantees shall be in addition to the guarantee stated herein.

20.0 MAINTENANCE BOND - After final inspection and acceptance of the work by the owner and architect and prior to acceptance by the owner, the contractor shall furnish a one year maintenance guarantee in the amount of 5% of the final total contract cost, in the form of a certified check upon a national or state bank located in New Jersey or a maintenance bond for the same amount guaranteeing faithful compliance with the guarantee noted above.

21.0 SUPERINTENDENCE BY CONTRACTORS - At the site of the work, the contractor shall employ construction superintendent or foreman who shall have full authority to act for the contractor. It is understood that such representative shall be acceptable to the architect and shall be one who can be continued in that capacity for the duration of the job unless he ceases to be on the contractor's payroll.

22.0 REMOVAL OF RUBBISH - The contractor shall clean up and remove from the premises at frequent intervals and when directed by architect all rubbish and refuse material of whatever nature resulting from his own contract and other trades employed by him. If contractor fails to comply with this requirement, the architect shall authorize the cleaning to be performed by others and backcharge the contractor accordingly for cost of such cleaning.

22.1 The contractor shall generally clean the premises of his debris, on the last work day of each week. None shall be left to be blown around the site. All shall be taken from the site and disposed legally.

23.0 RECORD DRAWINGS - During construction, the Contractor shall keep an accurate record of all deviations, between work as shown on drawings and that which is actually installed.

24.0 DIMENSIONS AND DETAIL DRAWINGS - Figured dimensions shall invariably take precedence over scale measurements and large scale details over small scale drawings. Contractor shall check and verify all measurements on project, shall be responsible for their corrections and fit, and make his work in conformity with same. Scaling of drawings is not permitted under any circumstance and the Contractor is totally responsible for said action.

25.0 TEMPORARY OCCUPANCY

25.1 The Owner at its election, may occupy any portion of the project as the work in connection therewith is completed to such a degree as will, in the opinion of the Owner, permit its use.

25.2 Such partial occupancy shall not constitute a waiver of Owner's right under the contract documents or shall partial occupancy relieve the contractor of his obligation or duties except as specifically set forth in this section.

25.3 The Owner will, prior to such partial occupancy, give notice to the Contractor thereof, and such occupancy shall be based upon the following terms.

25.4 The one year guarantee period called for in the General Conditions shall not begin to run until the date of the Architect's final certificate.

END OF SECTION

1.0 DESCRIPTION

Work included in this project shall be as follows:
REROOFING AT DRUM POINT ROAD ELEMENTARY SCHOOL, BRICK, NJ.

2.0 LOCATION: Brick, New Jersey.

2.1 CONTRACTOR'S RESPONSIBILITY:

1. Verify all measurements and conditions in the field.
2. Before starting work, examine all adjoining work on which the work of these specifications depend. Perform corrective work to all existing conditions necessary to make these specifications perform in all respects.

2.2 APPLICABLE DOCUMENTS

Publications, specifications and standards listed in this Specification form a part of this Specification to the extent indicated by the reference thereto. Unless otherwise indicated, the issue of effect on the date of issuing the Invitation for bids shall apply.

2.3 PROGRESS CHART

Within ten (10) days of the receipt of Notice to Proceed and prior to commencement of work, the Contractor shall submit and receive approval for a Progress Chart indicating the planned starting and completion dates for all work items.

2.4 PRICE SCHEDULE

Along with the Progress Chart, the Contractor shall submit a price schedule for each work item, indicating his breakdown for labor, material and equipment. Definitions applying are as follows:

1. LABOR COST: Direct labor wages and benefits, labor insurance, supervisory labor, small hand tools chargeable to labor, prorated cost of job expenses such as field office and telephone, prorated percentage of general (main office) overhead and percentage of profit.
2. MATERIAL COST: Direct material costs delivered to the site, prorated percentage of job expenses, general overhead and profit.

3. EQUIPMENT COST: Plant and equipment charges, prorated percentage of job expenses, general overhead and profit.

2.5 INTENT OF DRAWINGS AND SPECIFICATIONS

The intent of the drawings and specifications is to provide for the completion of the work in every detail that is described therein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies such as may be reasonably required to complete the work in accordance with the drawing.

2.6 COORDINATION OF CONTRACT WORK WITH BRICK TOWNSHIP BOARD OF EDUCATION, BRICK, NJ.

The building will be open to the public during work. Submit start and completion schedule to the Owner for approval.

2.7 REPAIR OF EXISTING WORK

The work shall be carefully laid out in advance. Where cutting or patching surfaces is necessary for proper installation, the work shall be carefully done by skilled mechanics. Any damage to the building or equipment caused by the Contractor shall be repaired by skilled mechanics of the trades involved, at no additional costs to the owner. The contractor shall patch and refinish all damaged surfaces caused by this work so as to match adjacent surfaces in material, texture and color to the satisfaction of the architect.

2.8 MATERIALS APPROVED

Catalog cuts and other information shall be submitted by the Contractor as required herein and as necessary to secure approval of the material and methods to be incorporated into the work.

Four (4) copies of catalogs and other printed information shall be submitted. One (1) copy of printed matter will be returned to the Contractor for his use.

All submittals shall be made using the "Shop Drawing/Material Approval Request" form. Submittals shall be numbered sequentially and shall include the information required.

Within ten (10) days after receipt on Notice to Proceed, the Contractor shall submit a submittals status log indicating all required submittals and dates to be submitted.

3.0 METHODS OF MATERIAL QUALIFICATION

Each material and product can be incorporated into the work and shall conform to the specifications. The Contractor may use any of the following methods to demonstrate compliance with the specifications except as otherwise required.

Certificates of Compliance with specification requirements signed by an authorized officer of the manufacturer, processor or approved trade association involved. Such certificates shall show the name and address of the Contractor and the name and location of the project.

All material shall be installed as per manufacturers guide specifications.

Labeling by the manufacturer on unbroken and unopened containers.

Official marking or labeling by recognized grading organization or national code association indicating compliance.

3.1 DELIVERY STORAGE AND HANDLINGS

Deliver materials to the job site in the manufacturer's sealed and undamaged containers or wrappings.

Each product delivered shall be identified with the manufacturer's name, date of manufacture, lot name and trade name.

Store materials up off the ground under cover, protected from weather and construction activities.

The Contractor shall store all material on the job site at his own risk. The Owner will not be responsible for any lost material.

3.2 PRECONSTRUCTION MEETING

A preconstruction meeting is required, and will be arranged for some convenient date after contract award, but before the start of site work.

4.0 INSPECTION

The Contractor shall keep the Architect fully informed of contract operations and plans so that he may arrange to be present at various times when work is being performed.

5.0 HOURS OF WORK

All construction operations shall be performed between the hours of 7:30 a.m. and 4:30 p.m. local time, Monday through Friday inclusive. If the Contractor desires to carry on work outside of these hours or on Saturday, Sunday, or Holidays, he shall submit application to the Owner for approval at least seventy-two (72) hours in advance. No such work outside the regular hours established above shall be undertaken without approval of the Owner.

6.0 UTILITIES

Electricity and water, as available, will be furnished by the Owner for construction purposes at no cost provided that these utilities are not overloaded.

7.0 TOILET FACILITIES

Shall be provided by and maintained by the Contractor.

8.0 REMOVAL

All material and debris removed shall become the property of the Contractor and shall be removed from the site during and after the work. Debris and waste material shall not be discharged into surrounding area. ~~None of the materials being removed may be reused, except as noted on the drawings.~~ All debris removed shall be properly disposed of in approved sites.

9.0 SPECIAL HOURS OF WORK:

The contractor will be allowed to work seven (7) days a week, twelve (12) hours a day, as approved.

END OF SECTION

SECTION 01300: SUBMITTALS AND SUBSTITUTIONS
PAGE 1 OF 5

1.0 GENERAL DESCRIPTION

Work Included:

1. Wherever possible throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined by manufacturer's name and catalog number, reference to recognized industry and State Standards, or description of required attributes and performance.
2. To ensure that the specified products are furnished and installed in accordance with design intent, procedures have been established for advance submittal of design data and for their review by the Architect.
3. Make all submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

Related work described elsewhere: Individual requirements for submittals are described in pertinent other sections of these specifications.

1.1 QUALITY ASSURANCE

Coordination of submittals: Prior to each submittal, carefully review and coordinate all aspects of each item being submitted and verify that each item and the submittal for it conforms in all respects with the requirements of the Contract Documents. By affixing the Contractor's signature to each submittal, certify that this coordination has been performed.

Certificates of compliance:

1. Certify that all materials used in the work comply with all specified provisions thereof. Certifications shall not be construed as relieving the Contractor from furnishing satisfactory materials if, after tests are performed on selected samples, the material is found to not meet specified requirements.
2. Show on each certification the name and location of the work, name and address of Contractor, quantity and date or dates of shipment or delivery to which the certificate applies, and name of the manufacturing or fabricating company. Certification shall be in the form of letter or company standard forms containing all required data. Certificates shall be signed by an officer of the manufacturing or fabricating company.
3. In addition to the above information, all laboratory test reports submitted with Certificates of Compliance shall show the date or dates of testing, the specified requirements for which testing was performed, and results of the test or tests.

1.2 SUBMITTALS

Submittal schedule: Within 20 days after award of contract, and before any items are submitted for approval, submit to the Owner two copies of the schedule described in Article 2.1 of this section.

Certificates of Compliance: Upon completion of the work and as a condition of its acceptance, submit to the Owner all Certificates of Compliance.

Procedures: Make submittals in strict accordance with the provisions of this section.

2.0 SUBMITTAL SCHEDULE

2.1 General: Compile a complete and comprehensive schedule of all submittals anticipated to be made during progress of the work. Include a list of each type of item for which Contractor's drawings, shop drawings, Certificates of Compliance, material samples, guarantees, or other types of submittals are required. Upon approval by the Owner, this schedule will become part of the contract and the Contractor will be required to adhere to the schedule except when specifically otherwise permitted.

Coordination: Coordinate the schedule with all necessary subcontractors and materials suppliers to ensure their understanding of the importance of adhering to the approved schedule and their ability to so adhere. Coordinate as required to ensure the grouping of submittals as described in Paragraph 3 below.

Revisions: Revise and update the schedule on a monthly basis as necessary to reflect conditions and sequences. Promptly submit revised schedules to the Architect for review and comment.

2.2 SHOP DRAWING AND COORDINATION DRAWINGS

1. Scale and measurements: make all shop drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
2. Type of prints required: submit all shop drawings in the form of one sepia transparency to each sheet plus one blue line or black line print of each sheet. Blueprints will not be acceptable.

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3. Reproduction of review shop drawings: Printing and distribution of review shop drawings for the Architects's use will be by the Contractor. All review comments of the Architect will be shown on the sepia transparency when it is returned to the Contractor. The Contractor shall make and distribute all copies required for his purposes.

2.3 MANUFACTURER'S LITERATURE

1. General: Where contents of submitted literature from manufacturers include data not pertinent to the submittal, clearly indicate which portion of the contents is being submitted for review.
2. Number of copies required: Submit the number of copies which are required to be returned plus two copies which will be retained by the Architect.

2.4 SAMPLES

1. Accuracy of samples: Samples shall be of the precise article proposed to be furnished.
2. Number of samples required: Unless otherwise specified, submit all samples in the quantity which is required plus one which will be retained by the Architect.
3. Reuse of samples: In situations specifically so approved by the Architect, the Architect's retained sample may be used in the construction as one of the installed items.

2.5 COLORS AND PATTERN

Unless the precise color and pattern is specifically described in the Contract Documents, and whenever a choice of color or pattern is available in a specified product, submit accurate color and pattern charts to the Architect for review and selection.

2.6 SUBSTITUTIONS

Approval required:

1. The contract is based on the standards of quality established in the Contract Documents.
2. All products proposed for use, including those specified by required attributes and performance, shall require approval by the State before being incorporated into the work.
3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the Architect.

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"Or Equal"

1. Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract Documents, do not assume that materials, equipment, or methods will be approved as equal unless the item has been specifically approved for this work by the Architect.
2. The decision of the Architect shall be final.

3.0 EXECUTION

3.1 IDENTIFICATION OF SUBMITTALS

General: Consecutively number all submittals. Accompany each submittal with a letter of transmittal containing all pertinent information required for identification and checking of submittals.

Internal identification: On at least the first page of each copy of each submittal, and elsewhere as required for positive identification, clearly indicate the submittal number in which the item was included.

Resubmittals: When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new submittal number.

Submittal log: Maintain an accurate submittal log for the duration of the contract, showing current status of all submittals at all times. Make the submittal log available for the Owner's review upon request.

3.2 COORDINATION OF SUBMITTALS

General: Prior to submittal for approval, use all means necessary to fully coordinate all material including, but not necessarily limited to:

1. Determine and verify all interface conditions, catalog numbers, and similar data.
2. Coordinate with other trades as required.
3. Clearly indicate all deviations from requirements of the Contract Documents.

Grouping of submittals: Unless otherwise specified, make all submittals in groups containing all associated items to ensure that information is available for checking each item when it is received. Partial submittals may be rejected as not complying with the provisions of the Contract Documents and the Contractor shall be strictly liable for all delays so occasioned.

SECTION 01300: SUBMITTALS AND SUBSTITUTIONS
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3.3 TIMING OF SUBMITTALS

General: Make all submittals far enough in advance of schedule dates for installation to provide all time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing deliveries.

Architects review time: In scheduling, allow at least ten (10) calendar days for review by the Architect following receipt of the submittal.

Delays: Delays caused by tardiness in receipt of submittals will not be an acceptable basis for extension of the contract completion dates.

3.4 ARCHITECT'S REVIEW

General: Review by the Architect shall not be construed as a complete check, but only that the general method of construction and detailing is satisfactory. Review shall not relieve the Contractor from responsibility for errors which may exist.

Authority to proceed: The notations "Reviewed, no exceptions noted", or "Reviewed, exceptions noted", authorize the Contractor to proceed with fabrication, purchase, or both, of the items so noted, subject to the revisions, if any, required by the Architect's review comments.

Revisions: Make all revisions required by the Architect. If the Contractor considers any required revision to be a change, he shall notify the Architect as provided for under "Changes" in the General Conditions. Show each drawing revision by number, date, and subject in a revision block on the drawing. Make only those revisions directed or approved by the Owner.

Revisions after approval: When a submittal has been reviewed by the Architect, resubmittal for substitution of materials or equipment will not be considered unless accompanied by an acceptable explanation as to why the substitution is necessary.

END OF SECTION

1.0 GENERAL

1.1 DESCRIPTION

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

Definitions:

1. "Day" used throughout the contract, unless otherwise stated, means "Calendar Day".

1.2 QUALITY ASSURANCE

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

Reference Standards: Perform all data preparation, analysis, charting, and updating in accordance with all recommendations contained in the current edition of "CPM in Construction" Manual of Associate General Contractors, or in accordance with other standards approved by the State.

Reliance Upon Approved Schedule:

1. The construction schedule as approved by the Owner will be an integral part of the Contract, and will establish interim Contract Completion dates for the various activities.
2. Should any activity not be completed within 15 days after the stated scheduled date, the Owner shall have the right to order the Contractor to expedite completion of the activity by whatever means the Owner deems appropriate and necessary, without additional compensation to the contractor.
3. Should any activity be 30 or more days behind schedule, the Owner shall have the right to perform the activity or have activity performed by whatever method the Owner deems appropriate.
4. Costs incurred by the Owner in connection with expediting construction activity under this Article shall be reimbursed to the Owner by the Contractor.
5. It is expressly understood and agreed that failure by the Owner to exercise the option to either order the Contractor to expedite an activity or to expedite the activity by other means shall not be considered precedent setting for any other activities.

1.3 SUBMITTALS

General: Comply with the provisions of Section 01300.

Preliminary Analysis: Within ten days after receipt of Notice to Proceed, submit one reproducible copy and four prints of a preliminary construction schedule, plus four prints of proposed format or Materials Status Reports, prepared in accordance with Part Three of this Section.

Construction Schedule: Within 30 days after receipt of Notice to Proceed, submit one reproducible and four prints of construction schedule prepared in accordance with Part Three of this Section.

Periodic Reports:

1. On the first working day of each month following submittal described in Paragraph 1.3 above, submit four prints of the construction schedule updated as described in Part Three of this Section.
2. Accompanying each periodic submittal of construction schedule submit four prints of the Materials Status Reports updated as described in Part Three of this Section.

2.0 PRODUCTS

2.1 CONSTRUCTION ANALYSIS

Diagram:

1. Graphically show the order and interdependence of all activities necessary to complete the work, and the sequence in which each activity is to be accomplished, as planned by the Contractor and his project field superintendent in coordination with all sub-contractors whose work is shown on the diagram. Activities shown on the diagram shall include, but are not necessarily limited to:
 - a. Project mobilization;
 - b. Submittals and approvals of Shop Drawings and Samples;
 - c. Procurement of equipment and critical materials;
 - d. Fabrication of special material and equipment, and their installation and testing;
 - e. Final cleanup;
 - f. Final inspection and testing;
 - g. All activities by the State that affect progress, required dates for completion, or both, for all and for each part of the work.
2. The detail of information shall be such that duration times of activities shall normally range from one to 15 days. The selection and number of activities shall be subject to the State's approval.

3. Show on the diagram, as a minimum for each activity, preceding and following event numbers, description of each activity, cost, and activity duration in calendar days. Submit diagram on a sheet 75 cm (30") high by the width required.

Mathematical Analysis:

1. Furnish a mathematical analysis of the diagram by manual or computer-aided means, including a tabulation of each activity. Show the following information as a minimum for each activity:
 - a. Preceding and following event numbers;
 - b. Activity descriptions;
 - c. Earliest start date (by calendar date);
 - d. Latest start date (by calendar date);
 - e. Earliest finish date (by calendar date);
 - f. Latest finish date (by calendar date);
 - g. Slack or float (by calendar days);
 - h. Monetary value of the activity;
 - i. Percentage of activity completed;
 - j. Contractor's earnings based on portion of activity completed.
2. The means used in making the mathematical analysis shall be capable of compiling the total value of completed and partially completed activities, and be capable of accepting modifications approved for time and logic adjustment.

Periodic Reports:

1. If computer-aided means are used, list the activities in computer printout sorts as follows:
 - a. By the preceding event number from lowest to highest, and then in order of the following event number;
 - b. By the amount of float, then in order of preceding event numbers, and then in order of succeeding event numbers.
 - c. In order of preceding event numbers, and then in order of succeeding event numbers (show the dollar amount and dollars spent to date for each activity);
 - d. Other sorts requested by the Owner, for which the Contractor will be reimbursed in accordance with the General Conditions provisions for "Changes".
2. If computer-aids are not used, provide equivalent information to the approval of the state.

2.2 MATERIAL STATUS REPORTS

Format: The Contractor's standard materials status report form will be acceptable if, in Architect's judgement, it provides sufficient pertinent data to determine that materials procurement flow is adequate for all needs of the work.

Content: Show at least the following information:

1. Item Description, listed in accordance with Specifications Section Number in which the item is called for;
2. Purchase Order No. and Date of Issue;
3. Vendor Name;
4. Date Shipped, and Shipping Means Utilized;
5. Estimated Date of Arrival at Job Site.
6. Actual Date of Arrival at Job Site, and Receiving Report Number.

Data Processing: Process the data by manual or computer-aided methods, but to a degree of promptness and accuracy assuring complete display of all pertinent current information at date of each periodic report.

3.0 EXECUTION

3.1 PRELIMINARY ANALYSIS

Contents:

1. Show all activities of the Contractor under this work for the period between receipt of Notice to Proceed and Submittal of Construction Schedule required under Paragraph 1.3 above.
2. Show the Contractor's general approach to remainder of the work.
3. Show cost of all activities scheduled for performance before submittal and approval of the construction schedule.

Submittal shall be in accordance with Paragraph 1.3 above.

3.2 CONSTRUCTION SCHEDULE

As soon as practicable after receipt of Notice to Proceed, complete the Construction Analysis described in articles 2.1 and 2.2 above, in preliminary form. Meet with the Architect, review contents of proposed construction schedule, and make all revisions agreed upon. Submit in accordance with Paragraph 1.3 above.

3.3 MATERIAL STATUS REPORTS

As soon as practicable after receipt of Notice to Proceed, meet with the State, review contents of proposed Materials Status Reports, and make all revisions to format agreed upon.

3.4 PERIODIC REPORTS

Construction Schedule:

1. Contents:

- a. Report actual progress by updating the mathematical analysis.
 - b. Note on the summary report, or clearly show on a revised issue of affected portions of the detailed diagram, all revisions causing changes in the detailed program.
 - c. Revise the summary report as necessary for clarity.
 - d. Show activities or portions of activities completed during the reporting period, and their actual value.
 - e. State the percentage of work actually completed and schedule as the report date, and the progress along the critical path in terms of days ahead of or behind the allowable dates.
 - f. If the work is behind schedule, also report progress along other paths with negative slack.
 - g. Include a narrative report which shows, but is not necessarily limited to:
 - (1) A description of the problem areas, current and anticipated;
 - (2) Delaying factors, and their impact;
 - (3) An explanation of corrective actions taken or proposed.
2. Show the date of latest revision. Submit in accordance with the provisions of 1.3 above.

Materials Status Reports:

1. On the letter of transmittal accompanying periodic reports, on an accompanying summary sheet, or by other means acceptable to the Architect, clearly indicate those items the delivery of which are critically overdue or otherwise hazardous to maintenance of the approved schedule.
2. Submit in accordance with the provisions of 1.3 above.

3.5 REVISIONS

Make only those revisions to approved Construction Schedule and approved Materials Status Reports as are approved in advance by the Architect.

END OF SECTION

1.0 GENERAL

1.1 DESCRIPTION

Work Included: Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this section.

Related Work Described Elsewhere: In addition to standards described in this section, comply with all requirements for cleaning up as described in various other sections of these specifications.

1.2 QUALITY ASSURANCE

Inspection: Conduct daily inspection, and more often if necessary, to verify that requirements of cleanliness are being met.

Codes and Standards: In addition to the standards described in this section, comply with all pertinent requirements of governmental agencies having jurisdiction.

2.0 PRODUCTS

2.1 CLEANING MATERIALS AND EQUIPMENT

Provide all required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.2 COMPATIBILITY

Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material or as approved by the Architect.

3.0 EXECUTION

3.1 PROGRESS CLEANING

General:

1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of material.
2. Do not allow the accumulation of scrap, debris, waste material, and other items not required for construction of this work.
3. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.

4. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection and protection of the ecology.

Site:

1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.
2. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site; restack, tidy, or otherwise service all arrangements to meet these requirements.
3. Maintain the site in a neat and orderly condition at all times.

Structures:

1. Weekly, and more often if necessary, inspect the structures and pick up all scrap, debris, and waste material. Remove all such items to the place designed for their storage.
2. Weekly, and more often if necessary, sweep all interior spaces clean. "Clean", for the purpose of this item, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and handheld broom.
3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using all equipment and materials required to achieve the required cleanliness.
4. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials have been installed. "Clean", for the purpose of this item, shall be interpreted as meaning free from all foreign material which, in the opinion of the Architect, may be injurious to the finish floor material.

3.2 FINAL CLEANING

Definition: Except as otherwise specifically provided, "clean", for the purpose of this article, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.

General: Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.1 above.

Site: Unless otherwise specifically directed by Owner, broom clean all paved areas on the site and all public paved areas directly adjacent to the site. Completely remove all resultant debris.

Structures:

1. Exterior: Visually inspect all exterior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. If necessary to achieve a uniform degree of exterior cleanliness, hose down the exterior of the structure. In the event of stubborn stains not removable with water, the Architect may require light sandblasting or other cleaning at no additional cost to the Owner.
2. Interior: Visually inspect all interior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only the specified cleaning materials and equipment.
3. Glass: Clean all glass inside and outside.
4. Polished Surfaces: To all surfaces requiring a routine application of buffed polish, apply the polish recommended by the manufacturer of the material being polished.

Timing: Schedule final cleaning as approved by the Architect to enable the Owner to accept a completely clean project.

3.3 CLEANING DURING OWNER'S OCCUPANCY

Should the owner occupy the work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning of the occupied spaces shall be as determined by the Architect in accordance with the General Conditions of the contract.

END OF SECTION

PART I - GENERAL

1.01 RELATED DOCUMENTS

- A. The attached are components of this section:
1. General Conditions.
 2. Supplemental Conditions.
 3. Statement of roofing material manufacturers qualifications.

1.02 SCOPE OF WORK

- A. Furnish and install specified roofing and related components to Brick Township Board of Education Drum Point ROAD School totaling approximately 50,000 sq. ft.
- B. Work includes:
1. Removal and replacement of designated roofing and insulation.
 2. Localized deck reattachment/repair/replacement.
 3. Installation of the following:
 - a. Tapered roof insulation system.
 4. Rework existing drains.
 - a. Cold process built-up roofing system.
 - b. Gravel surfaced.
 - c. Specified flashings and accessories.

1.03 QUALITY CONTROL

- A. Contractor shall:
1. Be experienced in cold process built-up roofing. 5 years minimum.
 2. Be acceptable by architect.
 3. Be Approved by Tremco. The contractor shall be required to acquire full-time inspection days utilizing Tremco Technical Service Inspectors. The minimum number of Technical Service full time inspection days will be 3 days for a project of 200 squares (20,000 square feet) or less. The number of days will increase at a rate of 1 day for each additional 100 squares (10,000 square feet).
 4. Has not been in Chapter 7 during the last 10 years.
 5. Provide list of at least 3 projects available for inspection employing same system within 50 mile radius of Owner.
- B. Roofing material supplier shall:
1. Be Associate Member in good standing with National Roofing Contractors' Association (NRCA) for at least five (5) years.

2. Be nationally recognized in roofing, waterproofing, and moisture survey industry.
3. Be approved by owner.
4. Has not been in Chapter 11 during the last five (5) years.
5. The building owner is desirous of working with a financially strong organization, which has the ability to protect and insulate the building owner from both product liability and warranty claims, relating to roofing, that could be brought before the building owner during the course of the roofing warranty period. As financial strength of suppliers are a requirement of the building owner proof of such must be shown. To this end, the following information is required by the building owner.
 - 1) The manufacturer must present to the building owner a certificate of insurance for product liability with minimum limits of \$200 million.
 - 2) The manufacturer must have a current net worth equivalent to 25% of yearly sales and demonstrate such with a financial statement supported by an affidavit from a corporate officer.
6. The building owner is a supporter of responsible Health, Safety and Environmental issues and requires all manufacturers to have similar concerns, convictions and commitments. To this end, the primary manufacturers of materials used on building owner roof must submit a formalized Corporate HS & E Policy and demonstrate active participation in such a policy.
7. The building owner is desirous of quality performance in all areas of roofing construction and as a result is requiring primary sourcing of material from one company in order to insure consistent quality. The material manufacturer supplying material for the building owner's roofs must manufacture at least 80% of the materials, they supply, in facilities actually owned or solely leased by said manufacturer. The material manufacturer shall submit verification of the foregoing by affidavit of corporate officer.
8. Provide Owner names of at least 3 qualified applicators.
9. Employ full-time Field Technical Services Representative available for monitoring project work on a full-time basis.
10. Provide local Field Representative to make periodic site visits, report work quality and job progress.
11. Provide list of at least 5 projects available for inspection employing same roofing system within 50 mile radius of Owner.
12. The presence and activity of the manufacturer's/specifier's representative and/or owner's representative shall in no way relieve the contractor of contractual responsibilities or duties.
13. Final inspection:
 - a. Will be scheduled by roofing material manufacturer upon

- job completion.
- b. Attendance:
 - 1) Contractor.
 - 2) Roofing material manufacturer/specifier.
- c. Minimum agenda:
 - 1) Walkover inspection.
 - 2) Identification of problems which may impede issuance of warranty.
- C. Random sampling:
 - 1. Roofing material:
 - a. During course of work, Owner's Representative may secure samples according to ASTM D140-88 of materials being used from containers at job site and submit them to an independent laboratory for comparison to specified material.
 - b. Should test results prove that a material is not functionally equal to specified material:
 - 1) Contractor shall pay for all testing.
 - 2) Roofing installed and found not to comply with the specifications shall be removed and replaced at no change in the contract price.
- D. Plans and specifications:
 - 1. Contractor must notify owner and specifier of any omissions, contradictions or conflicts seven (7) days before bid date. Owner and specifier will provide necessary corrections or additions to plans and specifications by addendum. If contractor does not so notify owner and specifier of any such condition, it will be assumed that the contractor has included the necessary items in the bid to complete this specification.
 - 2. It is the intent that this be a completed project as far as the contract documents set forth. It is not the intent that different phases of work on this project be delegated to various trades and subcontractors by the contract documents. Contractor must make own contracts with various subcontractors, setting forth the work these subcontractors will be held responsible for. Contractor alone will be held responsible by the owner for the completed project.
 - 3. If the contractor feels a conflict exists between what is considered good roofing practice and these specifications contractor shall state in writing all objections prior to submitting quotations.
 - 4. It is the contractor's responsibility during the course of the work, to bring to the attention of the owner's representative any defective membrane, insulation or deck discovered where not previously identified.

- A. ASTM - American Society for Testing and Materials, Philadelphia, PA.
- B. FM - Factory Mutual System, Norwood, MA.
- C. NRCA - National Roofing Contractors Association, Chicago, IL.
- D. SMACNA - Sheet Metal and Air Conditioning Contractors National Association, Vienna, VA.
- E. UL - Underwriters Laboratories, Northbrook, IL.

1.05 SUBMITTALS

- A. Submit five days prior to bid date:
 - 1. Product compatibility:
 - a. Written verification from roofing material supplier that major roofing components, including (but not limited to) coatings, cold process adhesives; roofing ply sheets; reinforcement fabric felts and mats; mastics; and sealants are all compatible with each other.
 - 2. Test reports:
 - a. Written verification from roofing material supplier that roofing system meets or exceeds regulatory agency/s requirements.
 - 3. Red label products:
 - a. Written verification from roofing material supplier that cold process coatings are not red label.
 - 4. Product data:
 - a. Product data sheets.
 - b. Material safety data sheets.
 - c. Samples of coatings, adhesives, and roofing ply sheets.
 - d. Samples of each material specified, properly labeled.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Delivery of materials:
 - 1. Deliver materials to job-site in new, dry, unopened, and well-marked containers showing product and manufacturer's name.
 - 2. Deliver materials in sufficient quantity to allow continuity of work.
 - 3. Coordinate delivery with Owner.
- B. Do not order project materials or start work before receiving Owner's written approval.
- C. Storage of materials:
 - 1. Store roll goods on ends only. Discard rolls which have

- been flattened, creased, or otherwise damaged. Place materials on pallets. Do not stack pallets.
2. Stack insulation on pallets.
 3. Store materials marked "keep from freezing" in areas where temperatures will remain above 40°F.
 4. Store metal roof deck on pallets with one end elevated to provide drainage.
 5. Remove plastic packaging shrouds. Cover top and sides of all stored materials with tarpaulin (not polyethylene). Secure tarpaulin.
 6. Rooftop storage: Disperse material to avoid concentrated loading.
 7. No materials may be stored in open or in contact with ground or roof surface.
 8. Should Contractor be required to quickly cover material temporarily, such as during an unanticipated rain shower, all materials shall be stored on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom.
 9. Contractor shall assume full responsibility for the protection and safekeeping of products stored on premises.

D. Material handling:

1. Handle materials to avoid bending, tearing, or other damage during transportation and installation.
2. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or situate material handling equipment in locations that will hinder smooth flow of vehicular or pedestrian traffic.
3. BURmastic Composite Ply: Do not remove packaging tubes until roll is ready for use.

1.07 SITE CONDITIONS

A. Field measurements and material quantities:

1. Applicator shall have SOLE responsibility for accuracy of all measurements, estimates of material quantities and sizes, and site conditions that will affect work.

B. Existing conditions:

1. Building space directly under roof area covered by this specification will be utilized by on-going operations. Do not interrupt Owner operations unless prior written approval is received from Owner.
2. Access to roof shall be from exterior only.
3. Air-conditioning units and other equipment shall be moved as required to install roofing materials complete and in accordance with plans and specifications. When units and equipment are to be moved, they shall be carefully disconnected and removed to a protected area so as not to

- damage any part or component thereof, and shall be reconnected in such a way that they are restored to a prior work operating condition. Appropriate measures shall be taken to prevent dust, vapors, gases or odors from entering the building during roof removal, replacement or repair.
4. All disconnection and reconnection shall be performed by a mechanical an/or electrical company licensed to perform such work.

C. Asbestos:

1. Contractor must conduct its operations according to applicable requirements including but not limited to those established by:
 - a. Occupation Safety and Health Administration (OSHA).
 - b. Environmental Protection Agency (EPA).
 - c. Department of Transportation (DOT).
 - d. State or Local Air Pollution Control Authorities/Agencies.
 - e. State or Local Solid Waste or Hazardous Waste Authorities/Agencies.
 - f. State or Local Health Department(s).
 - g. State or Local Building Code Authorities.
 - h. Other federal, state or local agencies or authorities.
2. Contractor or owner shall perform appropriate inspections, surveys and file timely notifications to proper authorities prior to starting roof renovation or demolition activities. Inspectors, project planners, project managers, contractors and workers involved in the roof project shall have appropriate training, licenses and registrations. Contractor and owner shall be responsible for determining and implementing regulatory compliance activities, including but not limited to work practices, engineering controls, personal protection, air monitoring, testing, hazard communication, material handling, record retention, and arranging for waste disposal/handling.
3. Contractor must file a Uniform Hazardous Waste Manifest from proper landfill site for each load of asbestos containing material removed. Copies must be sent to owner and material manufacturer/ specifier. Transportation of waste shall be in accordance with applicable Department of Transportation (DOT) requirements.

D. Safety requirements:

1. All application, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
2. Comply with federal, state, local and Owner fire and safety requirements.
3. Advise Owner whenever work is expected to be hazardous to Owner, employees, and/or operators.
4. Maintain a crewman as a floor area guard whenever roof decking is being repaired or replaced.

5. Maintain fire extinguisher within easy access whenever power tools, roofing kettles, and torches are being used.
- E. Environmental requirements:
 1. Do not work in rain, snow, or in presence of water.
 2. Do not work in temperatures below 40°F.
 3. Do not install materials marked "keep from freezing" when daily temperatures are scheduled to fall below 40°F.
 4. Do not perform masonry work below 40°F.
 5. Remove any work exposed to freezing.
 6. Advise Owner when volatile materials are to be used near air ventilation intakes so that they can be shut down or blocked as owner requires.

1.08 SUBSTITUTIONS

- A. When a particular make or trade name is specified, it shall be indicative of standard required. Bidders proposing substitutes shall submit the following 5 days prior to bid date to Owner:
 1. Written application with explanation of why it should be considered.
 2. Accredited testing laboratory certificate comparing substitute's physical/performance attributes to those specified.
- B. Only substitutes approved in writing by Owner prior to scheduled bid date will be considered.
- C. Notification of approvals will be mailed at least 3 days before bid opening.
- D. Owner reserves right to be final authority on acceptance or rejection of any substitute.

1.09 PAYMENT SECURITY

- A. Any of the following:
 1. Payment & Performance Bonds: Contractor purchases Payment and Performance Bonds for benefit of Owner and material supplier. Bonding company/surety shall be rated B+ or better in current Key Rating Guide as issued by A. M. Best Co., Oldwick, NJ.
- B. Progress payments:
 1. Contractor shall establish with owner, owner's procedure for payment and retainages prior to commencement of work on this project.
 2. Partial or progress payments shall not relieve contractor of performance obligations under this contract, nor shall such payments be viewed as approval or acceptance of work performed.
 3. Final payment shall be withheld until all provisions of the

specifications are met.

1.10 UNIT PRICES

A. Quote unit prices on:

1. Deck replacement - \$/sq. ft.
2. Deck repair - \$/sq. ft.
3. Lowering drains - \$/drain.
4. Drain flashing collar - \$/collar.
5. Drain repair - \$/drain.
6. Wood blocking replacement - \$/linear ft.
7. Wood blocking replacement - \$/board ft.
8. Unit removal - \$/unit, including deck installation to close opening.

1.11 WARRANTY/GUARANTEE

A. Warranty:

1. Upon project completion, Tremco acceptance, and once complete payment has been received by both Contractor and Tremco, Tremco shall deliver to Owner a ten (10) year Tremco Roofing System Quality Assurance Warranty and Owner's Manual. Tremco will, during the second and fifth year of this warranty, inspect and provide a written Executive Summary.

PART II - PRODUCTS

2.01 GENERAL

- A. Comply with quality control, references, specifications, and manufacturer's data. Products containing asbestos are prohibited on this project. Use only asbestos-free products.
- B. Use products with personal protection. User must read container label and material safety data sheets prior to use.

2.02 ACCEPTABLE MANUFACTURER

- A. Tremco Inc., Cleveland, OH 216/292-5000 or approved equal.

2.03.1 ROOF DECKING (METAL DECK)

A. Metal roof deck:

1. Gage, rib depth, rib configuration - match existing; three (3) span; lapped and stitched joints.
2. Sheet steel: ASTM A 446-85, Grade A structural quality; with G90 coating (galvanized).
3. Butt and finish strips: Twenty (20) gage sheet steel.
4. Acceptable manufacturers:

- a. Bowman Construction Products, Pittsburgh, PA.
 - b. Consolidated Systems, Inc., Columbia, SC.
 - c. Roll Form Products, Inc., Boston, MA.
 - d. Roof Deck, Inc., Hightstown, NJ.
 - e. United Steel Deck, Inc., Summit NJ.
 - f. Verco Manufacturing Co., Phoenix, AZ.
 - g. Vulcraft Division, Nucor Corp., Charlotte, NC.
 - h. Wheeling Corrugating Co., Division Wheeling-Pittsburgh Steel Corp., Wheeling WV.
5. Metal roof deck fasteners: TEKS by Buildex Div. of ITW, Itasca, IL.
 6. Deck sidelap stitching: 10-16 x 3/4 inch Hex Washer Head, EKS/1 with pilot point.
 7. Deck to bar joist: 12-24 x 7/8 inch Hex Washer Head, TEKS/4.
 8. Deck to structural steel: 12-24 x 1-1/4 inch Hex Washer Head, TEKS/5.

2.03.2 ROOF DECKING (CEMENTITIOUS WOOD FIBER DECK)

- A. Cementitious wood fiber roof deck:
 1. Deck material and accessories.
 2. Tectum by Tectum, Inc., Newark, OH.
 3. Fibroplank by Martin Fireproofing, Georgia Inc., Elberton, GA.
 4. Permadeck by Concrete Products, Inc., Brunswick, GA.

2.04 WOOD BLOCKING & CURBS

- A. Lumber:
 1. Southern Pine; No. 2 grade; free from warping and visible decay; pressure-treated with chromated copper arsenate (CCA) to meet AWPB, LP-22, 0.40 retention, and marked.
- B. Free floating fascia cant: Clear Western Red Cedar bevel siding.

2.05 INSULATION

- A. Tapered insulation system:
 1. FS HH-I-1972/2(1), Class 1, isocyanurate insulation.
 2. Slope per running foot: 1/8 inch.
 3. Minimum thickness: 1.5 inch.
- B. Tapered edge strip:
 1. ASTM C 208-72(1982), impregnated fiberboard tapered from 1-5/8 inch to 1/8 inch.
 2. Size: 12 x 48 inches.
- C. Insulation adhesive:
 1. FAS N FREE by Tremco.

- D. Cricket adhesive:
 - 1. ~~FAS N FREE~~ by Tremco.
- E. Crickets:
 - 1. ASTM C 208-72(1982), asphalt coated fiberboard, factory fabricated, 1/2 inch slope, 2 x 4 feet dimension.
- F. Tapered edge adhesive:
 - 1. ~~EAS N FREE~~ by Tremco.
- G. Fiberboard (Metal Deck) ?
 - 1. 4' x 4' x 1"
 - 2. adhere to base layer insulation.

2.06 MECHANICAL FASTENERS

- A. Wood to wood:
 - 1. Galvanized, common, annular ring nail.
 - 2. Length: Sufficient to penetrate underlay blocking 1-1/4 inches.
- B. Wood to steel deck:
 - 1. Tremco/Olympic No. 14-10 Heavy Duty Roofing Fastener, with CR-10 fluorocarbon coating by Tremco.
 - 2. Screws: Sufficient to penetrate steel deck 1/2 inch.
- C. Aluminum sheet metal to wood blocking:
 - 1. FS FF-N-105B(3) Type II, Style 20, roofing nails; 6061-T913 alloy wire, flat head, diamond point, round, barbed shank.
 - 2. Length: Sufficient to penetrate wood blocking 1-1/4 inches minimum.
- D. Drawband:
 - 1. Gold Seal stainless steel worm gear clamp by Murray Corporation, Cockeysville, MD.
 - 2. Power-Seal stainless steel worm drive clamps by Breeze Clamp Company, Saltsburg, PA.

2.07 ROOFING MATERIALS

- A. Adhesives:
 - 1. Base ply adhesive:
 - a. BURmastic by Tremco.
 - 2. Interply adhesive:
 - a. BURmastic by Tremco.
 - 3. Surfacing adhesive:
 - a. BURmastic by Tremco.

- B. Base ply:
 - 1. BURmastic Composite Ply by Tremco.
- C. Ply sheet:
 - 1. BURmastic Composite Ply by Tremco.
- D. Related materials:
 - 1. Asphalt mastic:
 - a. ELS by Tremco.
 - 2. Water based primer:
 - a. Tremprime W.B. by Tremco.
 - 3. Flashing adhesive:
 - a. Sheeting Bond, by Tremco.
 - 1) Black.
 - 4. Flashing sheet:
 - a. Elastomeric Sheeting, by Tremco.
 - b. Color: black
 - 5. Flashing tape:
 - a. TF-Tape by Tremco.
 - 6. Pitch pan mastic:
 - a. ELS by Tremco.
 - 7. Roofing aggregate:
 - a. Hard, durable, opaque; washed free of clay, loam, sand or other foreign substances.
 - b. Do not use: Crushed gravel, white dolomite (marble chips), Joplin chats, scoria, limestone, volcanic rock, crushed oyster and clam shells, crushed brick tile, or cinders.
 - c. ASTM D 1863-86, size six (6).
 - 8. Sealants:
 - a. Drawband sealant:
 - 1) TremSEAL GP by Tremco.
 - 9. Stripping adhesive for metal edges:
 - a. ELS by Tremco.
 - 10. Stripping adhesive for metal flanges:
 - a. BURmastic Adhesive by Tremco.
 - 11. Stripping ply:
 - a. BURmastic Composite Ply by Tremco.
 - 12. Stripping ply:
 - a. Tremco Composition Flashing.
- A. TREMLINE fascia by Tremco.
 - 1. Fascia width: Eight (8) inches.
 - 2. Elastomeric sheeting color: Black.
 - 3. Membrane width: Sufficient to extend onto horizontal roofing six (6) inches minimum.
- B. Gutter:
 - 1. Aluminum: ASTM B209-89, alloy and temper - 3003-H14, mill finish.
 - a. Thickness: 0.040 inches.
- C. Coping cap:
 - 1. Aluminum: ASTM B209-89, alloy and temper - 3003-H14, mill finish.
 - a. Thickness: 0.040 inches.

- D. Pitch pans with hood:
1. Aluminum: ASTM B209-89, alloy and temper - 3003-H14, mill finish.
 - a. Thickness: 0.040 inches.
- E. Work shall be in accordance with Architectural Sheet Metal Manual, as issued by Sheet Metal and Air Conditioning Contractors' National Association, Inc., (SMACNA).

2.08 SYSTEM PERFORMANCE REQUIREMENTS:

A. BURMASTIC ADHESIVE

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Asbestos content	None	ASTM D 276-87
Viscosity @ 77°F	80,000-200,000 cP	ASTM D 2196-86
Density @ 77°F	8.1 lb/gal	ASTM D 1475-85
Nonvolatile Matter	67%	ASTM D 4479-85
Asphalt content, min	42%	ASTM D 4479-85
Flash point	> 100°F	ASTM D 93-85
Uniformity & Consistency	Pass	ASTM D 4479-85

B. BURMASTIC COMPOSITE PLY

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Weight	31 lb/100 ft ²	ASTM D 228-69 (1978)
Breaking strength	135 lbf/in MD 130 lbf/in XD	ASTM D 146-78a (1986)
Pliability, 1/2 in. radius bend	No failures	ASTM D 146-78a (1986)
Mass of desaturated polyester/glass mat, min	2.2 lb/100 ft ²	ASTM D 146-78a (1986)
Tear strength	14 lbf MD 9 lbf XDA	ASTM D 1117-80
Surfacing & stabilizer max	65%	ASTM D 146-78a (1986)
Asphalt	10.0 lb/100 ft ²	ASTM D 228-69 (1978)
Resistance to puncture	120 lbf	ASTM E 154-68 (1979)

C. BURMESH

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Weight	1.32 lb/100 ft ²	ASTM D 146-78a (1986)
Moisture based on net weight	None	ASTM D 146-78a (1986)
Average tensile strength @ 77°F		
Wrap threads	75 lbf	ASTM D 146-78a (1986)
Filling threads	75 lbf	ASTM D 146-78a (1986)
Organic content		
Weight	18.7%	ASTM D 579-83
Type	PVC/acrylic water-based	-

D. ELS

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Asbestos content	None	ASTM D 276-87
Viscosity @ 77°F	480,000 - 1,000,000 cP	ASTM D 2196-81
Density @ 77°F	9.3 lb/gal	ASTM D 1475-85
Nonvolatile Matter	80%	ASTM D 4586-86
Behavior at 140° F (Sag Resistance)	1/8 in.	ASTM D 4586-86
Moisture vapor transmission rate	0.10 - 0.40 g/100 in. ² /24 hrs @ 0.020 in. thickness	ASTM E 398-83

E. FAS N FREE INSULATION ADHESIVE

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Volatile Organic Compound	20 g/liter	ASTM D3960-89
Asbestos Content	None	ASTM D276-87
Viscosity @ 77° F	70,000 cp	ASTM D2556-69
NonVolatile Content	99%	ASTM D1644-88
Density @ 77° F	8.5 lb/gal	ASTM D1875-69
Tensile Strength @ 77° F	200 PSI	ASTM D412-87
Elongation @ 77° F	1200%	ASTM D412-87
Adhesion Strength in shear @ 77° F	80 PSI	ASTM D816-82
T-Peel		
Adhesion @ 77° F	15 lbf/in	ASTM D1876-72
Cold Brittleness	Pass @ -60°F	ASTM D816-82

F. HYPALON ELASTOMERIC SHEETING

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Thickness	0.045 in.	ASTM D 751-89
Tensile strength	250 - 300 lbf	ASTM D 751-89
Elongation @ fabric break	25%	ASTM D 751-89
Tear resistance	95 lbf	ASTM D 751-89
Water absorption @ 72°F	< 5% within 7 days	ASTM D 471-89
Dimensional stability 1 hr @ 212°	1.0 - 1.25% within	ASTM D 1204-84
Low temperature flexibility	-40°F to -45°F	ASTM D 2136-84 (1989)
Ply adhesion	15 lbf/in.	ASTM D 413-82 (1988)
Water vapor transmission (procedure BW)	0.05 perms	ASTM E 96-88

G. TREMCO COMPOSITION FLASHING

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Tensile strength @ 0° F	MD 164.4 lbf XD 137.0 lbf	ASTM D2523-78 (1989)
Elongation @ 0° F	MD 2.6% XD 1.6%	ASTM D2523-78 (1989)
Weight	49.55 lbs/100 sq.ft.	ASTM D146-90
Pliability 1/2" radius bend @77° F	No failures	ASTM D146-90
Tear strength (Trapezoid) @ 77°F	MD 12.7 lbf XD 12.2 lbf	ASTM D1117-80
Asphalt coating weight	20.27 lbs/100 sq.ft.	ASTM D146-90
Puncture strength	151 lbf @0.9 in.	ASTM E154-88

H. TREMPRIME WB

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Asbestos content	None	ASTM D276-87
Viscosity @ 77° F (Stormer Kneb)	65 KU	ASTM D562-81
Density @ 77° F	8.8 lb/gal	ASTM D1475-85
Nonvolatile Content	32%	ASTM D1644-88
Flash point	Not Applicable	ASTM D3278-82
VOC*	60 g/l	ASTM D3960-89

* Volatile Organic Compound

I. TREMSEAL GP

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Tensile strength	180 psi	ASTM D 412-87
Ultimate elongation	550%	ASTM D 412-87
Adhesion-in-peel	25 lbf/in.	ASTM C 794-80 (1986)
Weep & sag	Passes	ASTM C 639-83
Staining	Passes	ASTM C 510-77 (1983)
Weight-loss, cracking & chalking after heat aging	Passes	ASTM C 792-75 (1987)
Hardness @ 77°F, 50% RH (Shore A)	25 ± 5	ASTM C 661-86
Durability (Bond & Cohesion)	Passes (On mortar, granite, and anodized aluminum at ± 25% movement)	ASTM C 719-86

PART III - EXECUTION

3.01 EXAMINATION

- A. Verify conditions as satisfactory to receive work.
- B. Do not begin roofing until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.
- C. Verify that work of other trades penetrating roof deck or requiring men and equipment to traverse roof deck has been approved by Owner, manufacturer, and roofing contractor.
- D. Check projections, curbs, and deck for inadequate anchorage, foreign material, moisture, or unevenness that would prevent quality and execution of new roofing system.

3.02 GENERAL WORKMANSHIP

- A. Substrate: Free of foreign particles prior to laying roof membrane.
- B. Phased application: Not permitted. All plies shall be completed each day.
- C. Traffic and equipment: Kept off completed plies until adhesive has set.
- D. Wrapper and packaging materials: Not to be included in roofing system.

- E. Entrapped aggregate: Not permitted within new membrane. Its discovery is sufficient cause for rejection.
- F. Ply shall never touch ply, even at roof edges, laps, tapered edge strips, and cants.
- G. Fit plies into roof drain rims; install lead flashing and finishing plies; secure clamping collars; install domes.
- H. Extend roofing membrane to top edge of cant at wall and projection bases.
- I. Cut out fishmouths/side laps which are not completely sealed; patch. Replace all sheets which are not fully and continuously bonded.
- J. Insulation:
 - 1. Install insulation boards in courses parallel to roof edges mopping surface up.
 - a. Firmly butt each insulation board to surrounding boards. Do not jam or deform boards.
 - b. Eliminate open joints and uneven surfaces.
 - 2. Maximum insulation gap: 1/4 inch.
 - 3. Fill insulation board joint gaps larger than 1/4 inch with roof insulation.
 - 4. Maximum elevation variation between boards at joints: 1/8 inch.
 - 5. Cut and fit insulation boards where roof deck intersects vertical surfaces. Cut board 1/4 inch from vertical surface.
 - 6. Stagger joints at least six (6) inches.
 - 7. Filler size: Eighteen (18) inches in length or width, minimum.
- K. Insulation: Form continuous insulation joints over deck flange. Do not cantilever insulation edges over deck ribs. Minimum bearing surface: 1-1/2 inches.

3.03 PREPARATION

- A. Protection:
 - 1. Contractor shall be responsible for protection of property during course of work. Lawns, shrubbery, paved areas, and building shall be protected from damage. Repair damage at no extra cost to Owner.
 - 2. Provide at site prior to commencing removal of debris, a dumpster or dump truck to be located adjacent to building where directed by Owner.
 - 3. Roofing, flashings, membrane repairs, and insulation shall be installed and sealed in a watertight manner on same day of installation or before arrival of inclement weather.

4. At start of each work day drains within daily work area shall be plugged. Plugs to be removed at end of each work day or before arrival of inclement weather.
5. Preparation work shall be limited to those areas that can be covered with installed roofing material on same day and before arrival of inclement weather.
6. Arrange work sequence to avoid use of newly constructed roofing for storage, walking surface, and equipment movement. Move equipment and ground storage areas as work progresses.
7. Protect building surfaces at set-up areas with tarpaulin. Secure tarpaulin. Remove dumpster from premises when full and empty at approved dumping or refuse area. Deliver empty dumpster to site for further use. Upon job completion, dumpster shall be removed from premises. Spilled or scattered debris shall be cleaned-up immediately. Removed material to be disposed from roof as it accumulates.
8. At end of each working day, removal areas shall be sealed with water stops along edges to prevent water entry.
9. Provide clean plywood walkways and take other precautions required to prevent tracking of aggregate/debris from existing membrane into new work area where aggregate/debris pieces can be trapped within new roofing membrane. Contractor shall instruct and police workmen to ensure that aggregate/debris is not tracked into new work areas on workmen's shoes or equipment wheels. Discovery of entrapped aggregate/debris within new membrane is sufficient cause for its rejection.

B. Surface preparation:

1. Lift counterflashing; cut corners to within one (1) inch of reglet.
2. Remove: Existing roofing, insulation to roof deck.
3. Sweep clean roof deck.
4. Remove flashings to substrate.
5. Remove perimeter gravel stop to wood blocking.

3.04 CARPENTRY

A. Roof edge:

1. Mechanically attach wood blocking. Offset blocking layers twelve (12) inches; weave corners.
 - a. Blocking thickness: Equal to final insulation thickness including tapered edge strips.
2. Fasteners shall be installed in two (2) rows staggered. Spacing in any one (1) row shall not exceed twenty-four (24) inches. Within eight (8) feet of outside corners, spacing shall not exceed twelve (12) inches in any one (1) row.
3. Install wood cants over TREMLINE deck brackets. Nail two

(2) rows at a spacing not to exceed twelve (12) inches from each side of deck brackets. Miter corners.

B. Gutter edge:

1. Mechanically attach wood blocking. Offset blocking layers twelve (12) inches; weave corners.
 - a. Blocking thickness: Equal to final insulation thickness including tapered edge strips.
 - b. Width: Equal to or greater than flange width.
2. Fasteners shall be installed in two (2) rows staggered. Spacing in any one (1) row shall not exceed twenty-four (24) inches. Within eight (8) feet of outside corners, spacing shall not exceed twelve (12) inches in any one (1) row.

C. Expansion joints(s):

1. Install horizontal and vertical blocking.
 - a. Vertical blocking:
 - 1) Thickness: Two (2) inches, nominal.
 - 2) Height: Eight (8) inches above final surface of roofing.
 - b. Horizontal blocking:
 - 1) Thickness: Equal to final insulation thickness, including tapered edge.
 - 2) Width: Four (4) inches, nominal.
2. Mechanically attach horizontal blocking to deck. Fasteners shall be installed in two (2) rows staggered. Spacing in any one (1) row shall not exceed twenty-four (24) inches.
3. Install wood cants to blocking. Nail two (2) rows staggered to horizontal and vertical blocking. Spacing in any one (1) row shall not exceed twenty-four (24) inches.

D. Wall flashing(s) for non-wall-supported deck:

1. Install horizontal and vertical blocking.
 - a. Vertical blocking:
 - 1) Thickness: Two (2) inches, nominal.
 - 2) Height: Eight (8) inches above final surface of roofing.
 - b. Horizontal blocking:
 - 1) Thickness: Equal to final insulation thickness, including tapered edge.
 - 2) Width: Four (4) inches, nominal.
2. Mechanically attach horizontal blocking to deck. Fasteners shall be installed in two (2) rows staggered. Spacing in any one (1) row shall not exceed twenty-four (24) inches.
3. Install wood cants to blocking. Nail two (2) rows staggered to horizontal and vertical blocking. Spacing in any one (1) row shall not exceed twenty-four (24) inches.
4. Place compressible insulation between wall and vertical blocking to top of blocking.
5. Drape flexible vapor retarder over insulation and face of blocking.

- E. Metal sleeve and storm collar:
1. Mechanically attach wood blocking to deck at all storm collar locations. Minimum two (2) fasteners per section.
 2. Offset blocking layers twelve (12) inches, weave corners.
 - a. Blocking thickness: Equal to final insulation thickness including tapered edge.
 - b. Blocking width: Four (4) inches, nominal.
- F. Pitch pocket locations:
1. Mechanically attach wood blocking to structural deck at all pitch pan locations; minimum two (2) fasteners per section.
 2. Offset blocking layers twelve (12) inches; weave corners.
 - a. Blocking thickness: Equal to final insulation thickness including tapered edge.
 - b. Width: Four (4) inches, nominal.

G. Wood blocking fastening pattern:

	X		X		X		X		X		X
X		X		X		X		X		X	

- H. Light metal parapet cap locations:
1. Mechanically attach wood blocking with 3/8 inch diameter wedge anchors four (4) feet o.c., minimum two (2) fasteners per section of blocking. Countersink anchors flush with blocking surface.
 - a. Blocking thickness: Two (2) inches nominal.
 - b. Blocking width: Flush with edges.

3.05.1 ROOF DECK REPAIRS (METAL DECK)

- A. Metal roof deck repairs:
1. Deck reattachment:
 - a. Mechanically reattach loose sections of deck to steel support members twelve (12) inches o.c.
 - b. Side laps: Mechanically fasten eighteen (18) inches o.c.
 2. Deck replacement:
 - a. Remove defective metal decking. Examine supports. If unsound, contact owner immediately for future action.
 - b. Install new metal decking in accordance with SDI, Design Manual for Composite Decks, Form Decks, Roof Decks.

3.05.2 ROOF DECK REPAIRS (CEMENTITIOUS WOOD FIBER DECK)

- A. Cementitious wood fiber roof deck repairs:
1. Remove defective deck.
 2. Examine supports. If unsound, contact owner immediately for future action.
 3. Install new roof panels in accordance with deck material manufacturer's requirements.

3.06 BASE SHEET/ VAPOR RETARDER (CEMENTITIOUS WOOD FIBER DECK)

- A. Lay one (1) ply rosin sheathing paper perpendicular to slope direction over roof deck. Sidelaps - two (2) inches; endlaps - four (4) inches. Nail to hold in place.
- B. Install base sheet over sheathing paper. Lap four (4) inches on sides and ends. Nail nine (9) inches o.c. at lap; two (2) rows staggered eighteen (18) inches o.c., twelve (12) inches from each edge.

3.07 THERMAL INSULATION

- A. Install tapered insulation system in pattern prescribed by manufacturer's shop drawings. Mechanically attach insulation to deck. (METAL DECK)
- B. Adhere tapered insulation system in pattern prescribed by manufacturer's shop drawings.
- C. Prime substrate with Insulation adhesive primer at a rate of 150-250 sq. ft. per gallon.
- D. Adhere layer(s) with a ribbon coverage of solvent free insulation adhesive at a rate of one and one half (1 1/2) gallons per 100 sq. ft. Immediately after placement, walk insulation boards into adhesive to achieve solid contact.

3.08 CRICKETS

- A. Install premanufactured crickets.
- B. Adhere crickets to substrate with solvent free insulation adhesive.

3.09.1 ROOF SYSTEM APPLICATION

- A. Install base ply to roof and all wall, curb, and projection bases in a uniform and continuous application of cold process insulation adhesive.
- B. Ply laps: Four (4) inches.
- C. Immediately after installation, broom and/or roll ply sheet. Ensure complete and continuous seal and contact between adhesive and felts, including ends, edges and laps without wrinkles, fish mouths, or blisters. Broom/roller width: Thirty-four (34) inches minimum.
- D. Apply uniform and continuous pressure to exposed edge and end laps to ensure complete adhesion.

- E. Avoid walking on plies until mastic adhesive has set.
- F. Roofing ply shall never touch roofing ply, even at roof edges, laps, tapered edge strips, and cants.
- G. Cut out fishmouths/side laps which are not completely sealed; patch. Replace all sheets which are not fully and continuously bonded.
- H. Lap ply ends four (4) inches. Stagger end laps three (3) feet minimum.
 - 1. Adhesive application rate: Minimum 2-1/2 gals. per 100 sq. ft.
- I. Install three (3) plies of ply sheet, shingle fashion. Overlap starter strips twenty-six (26) inches with first ply, then overlap each succeeding ply 24-2/3 inches. Place ply sheets to ensure water will flow over or parallel to; but, never against exposed edges.
- J. Use twelve (12), twenty-four (24), and thirty-six (36) inch wide plies to start and finish roof membrane along roof edges and terminations.
- K. Immediately after installation, broom and/or roll ply sheet. Ensure complete and continuous seal and contact between adhesive and felts, including ends, edges and laps without wrinkles, fish mouths, or blisters. Broom/roller width: Thirty-four (34) inches minimum.
- L. Apply uniform and continuous pressure to exposed edge and end laps to ensure complete adhesion.
- M. Avoid walking on plies until adhesive has set.
- N. Overlap previous day's work twenty-four (24) inches.
- O. Lap ply membrane ends four (4) inches. Stagger end laps three (3) feet minimum.
- P. Embed each ply in a uniform and continuous application of interply mastic. Interply application rate: 2-1/2 gallons per 100 sq. ft.

3.09.2 DAILY WATERSTOP/TIE-INS

- A. Remove embedded gravel/debris from top ply of felt along termination.
- B. Width: Eighteen (18) inches.
- C. Adhere twelve (12) and eighteen (18) inch wide ply sheets from exposed deck to existing roofing with a continuous 1/16 inch thick application of tie-off mastic. Glaze cut-off with surfacing mastic. Extend eighteen (18) inch wide felt three (3) inches either side twelve (12) inch felt.

- D. Install "deadman" insulation filler at insulation staggers.
- E. Extend roofing system at least twelve (12) inches onto prepared area of adjacent roofing. Seal edge with six (6) inch wide reinforcing membrane embedded between alternate courses of tie-off mastic.
- F. At beginning of next day's work remove temporary connection by cutting felts evenly along edge of existing roof system. Remove "deadman" insulation fillers.

3.10 FLASHINGS

- A. General flashing requirements:
 - 1. Elastomeric Flashing:
 - a. Adhere elastomeric sheeting completely to flashing surface, cant, and roofing with Hypalon Flashing Adhesive. Let adhesive flash off, fifteen (15) minutes minimum.
 - b. Ensure complete bond and continuity without wrinkles or voids. Lap sheeting ends four (4) inches. Adhere laps with Hypalon flashing adhesive.
 - c. Elastomeric sheeting width: Sufficient to extend at least six (6) inches beyond toe of cant onto new roof.
 - d. Seal vertical and horizontal edges of sheeting with reinforcing membrane embedded in a base course of Hypalon Flashing Adhesive and a top course of Modified Asphalt Mastic.
 - 2. Two-Ply Stripping:
 - a. Set flange in asphalt mastic. Seal flange with two (2) stripping plies embedded between alternate applications of stripping adhesive/bitumen. Extend first ply four (4) inches beyond flange; second ply two (2) inches beyond first ply.
- B. At perimeter edges:
 - 1. Install new roofing to blocking edge. Nail with spiral or annular shank nails, eight (8) inch o.c. Nails to have one (1) inch integral cap.
 - 2. Install extruded aluminum free-floating fascia system according to manufacturer's published instructions.
 - a. Use prefabricated corners.
 - b. Minimum fascia length: Twenty-four (24) inches, two (2) deck brackets minimum.
 - 3. Elastomeric sheeting shall be of sufficient width that after being inserted and secured by fascia top cap, will extend at least six (6) inches onto new roof.
 - 4. Solidly adhere sheeting completely to cant and roofing in a uniform and continuous application of flashing adhesive.
 - 5. Seal horizontal and vertical edges of sheeting with reinforcing membrane embedded in a base course of hypalon flashing adhesive and a top course of modified asphalt mastic

- C. At roof edge(s) with gutter:
1. Fabricate and install new two-piece edge/gutter with outlet tubes. Slope gutter to outlets.
 2. Install 1/8 x one (1) inch straps thirty-six (36) inches o.c.
 3. Prior to setting and nailing horizontal flanges of gutter, trowel 1/16 inch uniformly thick layer of asphalt mastic to roofing surface receiving metal flange. Install dry sheet under gutter flange, covering wood blocking completely.
 4. Nail flange to wood blocking three (3) inches o.c., staggered.
 5. Prime metal flange with asphalt primer.
 6. Install two ply stripping described in general flashing requirements section.
- D. At wall flashings:
1. Install elastomeric base flashing described in general flashing requirements section.
 2. Sandwich top edge of sheeting between two (2) layers flashing tape.
 3. Secure top edge of sheeting to substrate with spiral or annular shank nails with one (1) inch cap, eight (8) inches o.c.
 4. Fabricate and install new counterflashing.
 5. Wipe clean metal surfaces of flashing joint with metal cleaner. Prime metal joint surfaces with metal primer. Allow to dry.
 6. Caulk flashing joint. Provide watershed. Tool neatly.
- E. At expansion joint(s):
1. Extend new roofing to top edge of cant. Nail eight (8) inches o.c. with spiral or annular shank nails, with one (1) inch cap.
 2. Install vinyl water barrier over joint opening. Allow barrier to drape four (4) inches within joint opening. Nail both sides of barrier four (4) inches o.c.
 3. Insert fiberglass batt insulation into expansion joint opening; fill entire opening.
 4. Install elastomeric base flashing described in general flashing requirements section.
 5. Sandwich top edge of sheeting between two (2) layers flashing tape.
 6. Secure top edge of sheeting to substrate with spiral or annular shank nails, with one (1) inch cap, eight (8) inches o.c.
 7. Fabricate and install expansion joint cover to curb.
 8. Bevel curb top for drainage:
 - a. Mechanically fasten to vertical portion of curb with neoprene-grommated screws twelve (12) inches o.c.
 - b. Overlap sections one (1) inch
- F. At wood curb flashings:
1. Remove mechanical equipment from curb.
 2. Install new roofing to top edge of cant. Nail eight (8) inches o.c. with spiral or annular nails, with a one (1) inch cap.

3. Install elastomeric base flashing described in general flashing requirements section.
 4. Sandwich top edge of sheeting between two (2) layers flashing tape.
 5. Secure top edge of sheeting to substrate with spiral or annular shank nails, with a one (1) inch cap, eight (8) inches o.c.
 - a. Fabricate and install counterflashing.
 6. Reinstall mechanical equipment onto curb. Refasten.
- G. At copings:
1. Installation of light metal parapet cap.
 - a. Install wood blocking.
 - b. Install continuous bent cleat on outside edge of wood blocking. Cleat shall be one (1) gage heavier than coping cover. Lap ends one (1) inch. Nail sixteen (16) inches.
 - c. Fabricate and install coping cover. Connect coping sections with 1-1/4 inch high standing seam. Extend front and rear sides of cover two (2) inches beyond wood blocking. Bend lower edges out forty-five (45) degrees maximum to form drip edge. Attach outside edge to continuous cleat with 3/4 inch lock. Attach inside edge to wood blocking twenty-four (24) inches o.c. At corners, form standing seam and miter.
- H. At pitch pockets:
1. Fabricate pitch pans. Sides: Four (4) inches high, hemmed to outside at top edge. Flange: Four (4) inches wide, completely around periphery. Clearance between projection and pitch pan: Two (2) inches. Set flange in mastic.
 2. Pack gap between roof-penetrating element and deck with compressible insulation. Seal with reinforcing membrane embedded between alternate courses of asphalt mastic.
 3. Nail flange to wood blocking three (3) inches o.c., staggered.
 4. Prime metal flange, projection, and pitch pan interior with asphalt primer.
 5. Install two ply stripping described in general flashing requirements section.
 6. Fill pitch pan with asphalt mastic. Double fill if necessary.
 7. Fabricate and install umbrella with drawband over pitch pan. Tighten drawband.
 8. Wipe clean top of umbrella and projection with metal cleaner. Prime surface with metal primer.
 9. Caulk stack/sheet metal interface. Provide watershed. Tool neatly.
- I. At metal sleeve and storm collar(s):
1. Apply 1/16 inch uniformly thick layer of asphalt mastic to surface receiving metal flange.
 2. Fabricate and install sleeve flashing. Height: Eight (8) inches. Flange width: Four (4) inches. Flange to extend completely around flashing periphery. Solder all joints. Double solder vertical joints.
 3. Nail flange to wood blocking three (3) inches o.c., staggered.

4. Prime flange with asphalt primer.
5. Install two (2) ply stripping described in general flashing requirements section.
6. Fabricate storm collar with bolted connection. Cover sleeve flashing three (3) inches minimum. Tighten bolts.
7. Wipe clean top of storm collar and projection with metal cleaner. Prime surface with metal primer. Caulk projection/sheet metal interface. Provide watershed. Tool neatly.

J. At roof drains:

1. Install tapered edge strip around drain to create approximate 48 x 48 inch sump. Miter corners. Seal toe of tapered edge to drain rim with reinforcing membrane embedded between alternate courses of asphalt mastic.
2. Install roofing system into sump and onto drain rim.
3. Plug drain to prevent water entry until service connection is completed.
4. Apply 1/16 inch uniformly thick layer of asphalt mastic to surface receiving lead flashing.
5. Set single piece lead flashing in mastic centered over drain; extend lead six (6) inches beyond drain rim. Neatly dress lead with wood block.
6. Clamp flashing collar to drain in bed of mastic.
7. Neatly cut lead/felts within drain at rim. Lead to extend one (1) inch into bowl.
8. Prime lead with asphalt primer.
9. Install two-ply stripping described in general flashing requirements section. Stripping shall not extend under clamping ring.

3.11 SURFACING APPLICATION

A. Flood coat:

1. Prior to application of surface treatment system, contractor shall inspect roof with manufacturer's representative.
2. Over entire roof surface spray apply uniform and continuous flood coat of BURmastic.
 - a. Coverage rate: Five (5) gallons per 100 sq. ft. $\pm$ 1/2 gallon per 100 sq. ft.
3. Immediately broadcast minimum 400 lbs. of new, clean roofing gravel per 100 sq. ft. Cover flood coat material completely.

3.12 ADJUSTING AND CLEANING

A. Repair of deficiencies:

1. Installations of details noted as deficient during Final inspection must be repaired and corrected by applicator, and made ready for reinspection, within five (5) working days.

B. Clean-up:

1. Immediately upon job completion, roof membrane and flashing surfaces shall be cleaned of debris.
2. Clean gutters and downspouts of debris.

Each bidder for the work included in the specifications and drawings and the contract documents shall submit with their bid the data requested in the following schedule of information. This data must be included in and made part of each bid document and contained in the sealed envelope. Failure to comply with this instruction may be regarded as justification for rejecting the Contractor's Proposal. Submit one (1) copy of this statement.

1. Name of bidder_____
2. Name of Material Supplier_____
3. Number of years manufacturing this roof system_____
4. Location of wholly owned and operated manufacturing facilities.

Facility_____

Facility_____

Product_____

Product_____

Street_____

Street_____

City_____

City_____

State_____

State_____

% of product used
mfg at this plant_____% of product used
mfg at this plant_____

Facility_____

Facility_____

Product_____

Product_____

Street_____

Street_____

City_____

City_____

State_____

State_____

% of product used
mfg at this plant_____% of product used
mfg at this plant_____

5. Submit Material Safety Data Sheets on products to be used.
6. Submit current independent laboratory results on roofing system that is proposed, prior to award of contract.
7. The proposed roof system to be installed shall meet all local and state safety, health, fire and building code requirements.

END OF SECTION