

MIDDLETON ASSOCIATES INCORPORATED
1702 W. COLLEGE AVE., SUITE E
NORMAL, IL 61761-2793
PHONE 309/452-1271 FAX 309/454-8049

SPECIFICATIONS FOR LABOR AND MATERIALS

FOR

PARKSIDE JUNIOR HIGH SCHOOL 2020 PARTIAL REROOF
101 N. PARKSIDE ROAD, NORMAL, IL 61761

FOR

MCLEAN COUNTY UNIT DISTRICT NO. 5
1809 HOVEY AVENUE
NORMAL, ILLINOIS 61761-4339

PROJECT NUMBER: 24082318

ISSUE DATE: Monday, February 3, 2020

PRE-BID MEETING: Friday, February 14, 2020 – 11:30 a.m. Prevailing Time --
Inclement weather not withstanding
Parkside Junior High School
101 N. Parkside Road, Normal, IL 61761
Meet at south side Mechanical Room

BID DATE: Thursday, February 20, 2020 – 9:30 a.m.

BID DELIVERED TO: Unit 5 Maintenance Warehouse
1999 Eagle Road
Normal, IL 61761

SPECIFICATION BOOKLET NO. _____



Expiration Date
11/30/20

A handwritten signature in black ink, appearing to read "Randall E. Middleton", written over a horizontal line.

[Seal and Signature]

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS
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PARKSIDE JUNIOR HIGH SCHOOL 2020 PARTIAL REROOF
101 N. Parkside Road, Normal, IL 61761
Project Number: 24082318

FOR: McLean County Unit District No. 5
District Office: 1809 Hovey Ave., Normal, IL 61761-4339
Maintenance Warehouse: 1999 Eagle Rd., Normal, IL 61761

SUPERINTENDENT OF SCHOOLS: Dr. Mark Daniel

ARCHITECT/ENGINEER: Middleton Associates, Incorporated
1702 W. College Avenue, Suite E
Normal, IL 61761-2793
middleton@middlettonassociates.net

ISSUE DATE: February 6, 2020

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DOCUMENT LIABILITY

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END 00020

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS
Section 00030 – Invitation for Bids

Sealed proposals will be received by: McLean County Unit District No. 5

For Project: McLean County Unit District No. 5
Parkside Junior High School 2020 Partial Reroof
A/E Project No. 24082318

Time of Bid Submission: **Thursday, February 20, 2020 – 9:30 a.m. -- Prevailing Time**
Public Opening following due time.

Location of Bid Submission: McLean County Unit District No. 5 Warehouse, Attn: Joe Adelman,
1999 Eagle Rd., Normal, Illinois 61761

Proposals shall be delivered to the above location prior to 9:15 a.m. Proposals shall be clearly identified on the outside of the envelope as "Sealed Proposal" and list the project title as shown above. Proposals will be opened and publicly read following the due time.

Terms of the proposal:

- Bid Security is required, 5% Bid Bond or Certified Check.
- Owner protective bonds are required in the amount of 100% of the Contract value after award.
- Illinois Prevailing Wage Act 820 ILCS 130/.01 *et seq.* applies to this job.
- 1992 Revised Statutes Illinois Criminal Code 720 ILCS: Article 33E Public Contracts: Bid Rigging (5/33E-3); Bid Rotating (5/E-4) Disclosure (5/33E-5); Interference (5/33E-1); Kickbacks (5/33E-7); Bribery (5/33E-8); Change Orders (5/33E-8), Drug-free Work Place Act 30 ILCS 580/1, Educational Loan Default 5 ILCS 385/1, Felony/Bribery Conviction 30 ILCS 505/10.2 and 505/10.3 apply to this job.
- The Board of Education has the right to reject or accept the bids submitted or to waive any bidding irregularities.

A Pre-Bid Meeting is scheduled for 11:30 a.m., Friday, February 14, 2020 at PARKSIDE JUNIOR HIGH SCHOOL, 101 N. Parkside Road, Normal, IL 61761.

Plans and specifications are available at Middleton Associates Incorporated, 1702 W. College Avenue, Normal, Illinois 61761-2793, Phone 309/452-1271, FAX 309/454-8049, and at www.middletonassociates.net. Scroll down and click on "Contractors". Refundable deposit for one printed set is \$25.00.

END 00030

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS

Section 00040 – Instructions for Bidders

1. GENERAL

1.1. LOCATION OF THE PROJECT:

PARKSIDE JUNIOR HIGH SCHOOL 2020 PARTIAL REROOF

101 N. Parkside Road, Normal, IL 61761

1.2. OBTAINING DRAWINGS & SPECIFICATIONS

- A. Drawings and Specifications may be obtained from the Architect, Middleton Associates Incorporated, 1702 W. College Ave., Suite E, Normal, IL 61761-2793, Telephone 309/452-1271, FAX 309/454-8049
E-Mail: www.middleton@middletonassociates.net
- B. There is a refundable deposit of \$25.00 per set.
- C. All sets of Bid Documents, except those held by the low bidder, are to be returned to the Architect/Engineer in good usable condition within ten (10) days following bid opening. Failure to do so shall be grounds for forfeiture of the otherwise refundable deposit. Drawings and Specifications may be examined at the office of the Owner or Architect without charge.

1.3. INTERPRETATION OF DOCUMENTS (See AIA General Conditions Section 00050 and Supplementary General Conditions Section 00800).

- A. Anyone having a doubt concerning the meaning of the Contract Documents, or any other questions, may submit a request for interpretation from the Architect/Engineer. All pre-bid interpretation shall be requested FIVE (5) DAYS prior to the bid due date. Response, other than minor clarification, will be in the form of Addenda and will be mailed to each Bidder.
- B. It shall be the Architect/Engineer's responsibility to clarify conflicts in requirements as may be reported to the Architect/Engineer. After bid due date, the Architect/Engineer shall determine the course to be followed for said clarification with no cost change to the Owner.
- C. All work in these documents shall be as described, including any and all trade subcontractors of the contractor's determination and designation with no cost increase to the Owner.

1.4. INTENT, ERRORS AND OMISSIONS

- A. Any known conflict between requirements of various portions of the Contract Documents shall be reported to the Architect/Engineer prior bid due date and shall fall under the authority of Interpretation of Documents.
- B. The Drawings are descriptive and directive in concept and are not intended to exhaust all detail situations required to complete the work. The

procedures detailed shall establish the general character of solutions needed for typical, non-typical, and peculiar situations at the job site.

- C. It is the intent of the documents that specified work and equipment be installed in a proper and finished manner, fully operational, at a minimum of generally accepted standards for good quality commercial construction. All necessary materials, labor, controls, accessories, brackets, fasteners, sealants, etc., to properly install and complete the work shall be provided unless specifically noted otherwise.
- D. Each Contractor and Subcontractor shall coordinate and cooperate with the other Contractors to provide proper installation. Verify dimensions, services, installation conditions, obstacles to the work and modifications necessary to complete the work and coordinate the fit, finish and scheduling of the work.

1.5. DOCUMENT INTENT, PROJECT COMPLETION, FITTING AND FINISHING FULLY FUNCTIONAL, USER READY

- A. It is the intent that all items of work included in the project are to be completely finished and all necessary associated components and accessories for proper completion are to be included in the work.
- B. Drawings are schematic in nature; every single element needed is not necessarily labeled, dimensioned or positioned. Unless specifically exempted, the Contractor shall provide as follows:
 - 1. Good quality fit, finish and workmanship at a level of competency and quality equal to or exceeding commercial construction in the area.
 - a. Sealants, caulks, flashings, transitions, closures and components to assure infiltration and weather tight result and finished appearance inside and out.
 - b. Sealants, flashings, closures at building connections.
 - c. Upper and lower flashings, in new construction and whenever possible, to shed water outward.
 - 2. All components and assemblies to assure proper installation and performance of manufactured equipment, per manufacturer's or industry association standards as a minimum.
 - a. Mechanical equipment, plumbing, piping, ventilation, valves back checks, connections etc.
 - b. Mechanical and electrical coordination, coordination of installation locations, hidden where possible, routed through the construction in the most expedient but concealed manner,
 - c. Minor relocation of piping, equipment, installations shall be provided without cost change within 10' either way or reasonable pathways of similar distance.

- d. All other equipment, kitchen, doors, hardware, windows and any other operable equipment
- e. Service access, filters, repairs always allow for reasonable repair and maintenance access.

1.6. BIDDING REQUIREMENTS

- A. Any Contractor Proposal may include Document 00307 Product Substitutions Form / Voluntary Alternates Form. Basic materials have been selected as noted in these Specification Sections and on the Drawings in order to reduce or eliminate any schedule / ordering delays. Any Contractor may propose substitute materials or voluntary alternates to the basic specified materials on this form. If any Contractor desires to offer substitutions or voluntary alternates, include this form with your Bid.

1.7. ADDENDA

- A. Addenda may be issued before the bid opening date to clarify or modify the Contract Documents.
- B. Said addenda shall become a part of the Contract documents and supersede any conflicting specifications or clarify intent of same.

1.8. BID SECURITY

- A. The Bidder shall furnish, along with his proposal, a bid bond or certified check in the amount of five percent (5%) of the bid proposal including all additive alternates. The above instrument shall be made payable to the Owner and shall serve as a guarantee that the Contractor will enter into the Contract with the Owner as per his bid, should the job be awarded to him.
- B. Should said Contractor refuse or fail to enter into a Contract with Owner per his bid for the work included in these Contract Documents within forty-five (45) days following bid due date, said bid guarantee shall become collectible, in full, by the Owner in payment for damages. See 00040/1.12 "RETURN OF BID SECURITY."

- 1.9. WITHDRAWAL OF BIDS. Bids may be withdrawn by the Owner or Corp. Officer of Contractor prior to the bid due date and time, after which time no bids may be withdrawn for a period of forty-five (45) days unless a Bidder has been released by the Owner's action.

1.10. PROPOSAL FORMS

- A. Each bidder shall submit his proposal, in duplicate, on proposal form provided. All applicable blank spaces on forms shall be filled out fully; numbers shall be stated both in writing and in figures; signatures shall be live in longhand. Completed forms shall be without delineation, alteration or erasure.

- B. Proposals shall not contain any recapitulation of the work and no oral proposals or modifications are invited for consideration. The Proposal & Contract Form automatically becomes the Contract upon the acceptance and signature of the Owner. See Paragraph 1.14 "COMMENCEMENT OF CONSTRUCTION."
- C. Substitutions of material other than that specified may be included on the proposal. See related Specification Sections for more information on Substitutions.

1.11. SIGNING OF BIDS

- A. All proposals shall be signed (live signatures, no copies of signatures accepted) by persons fully and duly authorized to sign bids.
- B. Any bid signed by a person other than as set forth above shall enclose with his bid proposal evidence of Power of Attorney.

1.12. AWARD OR REJECTION OF BIDS

- A. Although it is the intention of the Owner to accept the lowest qualified bid the Owner specifically reserves the right to waive all formalities and/or informalities, to reject any and all bids and/or accept the bid that, in the Owner's judgment, will be in the Owner's best interest.
- B. Contractor will note: All alternates that are applicable, or as may become applicable by addendum, must be bid.
- C. Should the time for award exceed the time stated for the proposal's expiration period, the Owner reserves the right to continue to negotiate with bidders in the line of award succession as a prior option rather than re-bid.

1.13. RETURN OF BID SECURITY

- A. After bids have been read along with alternates and/or substitutions as applicable and a successful Bidder has been approved by Owner, a Letter of Intent will be sent to the successful bidder and bid security may be returned to the unsuccessful bidders:
 - 1. Except the deposits of the two (2) bidders in line may be retained until Owner/Contractor agreements have been consummated.
 - 2. The Owner has released them.
 - 3. The Bid has expired.
- B. Following the signing of the Contracts and receipt of bonds, remaining bid security will be returned. If the successful Bidder fails to accept the Contract and submit acceptable bonds, same will be grounds for forfeiture of his bid security.

1.14. OWNER'S PROTECTIVE BONDS: A 100% of value Labor and Material Payment Bond and a Performance Bond including all alternates accepted is required in the

Contract and shall be included in the Contractor's Proposal.

- A. Periodic Change Orders that may occur to the Contract shall be included in each respective bond.
- B. Bonds shall cover the entire Contract without regard to the Contractor's assignment of work to Subcontractors or Suppliers.

1.15. COMMENCEMENT OF CONSTRUCTION

A. Contractor shall not commence work until the agreement has been executed by both Owner and Contractor and Insurance Certificate and Owner's Protective Bonds have been accepted by the Owner and the Architect. However, work shall commence promptly upon the Owner and Architect's acceptance of Insurance certification and applicable bonds. Commence progress and work completion shall be coordinated with the Owner's programmed use of the buildings.

- 1. **All insurance certificates shall specifically list McLean County Unit District No. 5 and the Architect, Middleton Associates Incorporated and their consultants and sub-consultants to the work, as added insureds or named insureds.**
- 2. **Start date – as early as May 26, 2020 and no later than June 2, 2020.**

B. Progress at job site shall be continuous once work has commenced.

1.16. EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- A. Bidder shall carefully examine bidding documents and inspect the sites to obtain first-hand knowledge of existing conditions.
- B. **A Pre-Bid Meeting is scheduled for 11:30 a.m. prevailing time, Friday, February 14, 2020 at PARKSIDE JUNIOR HIGH SCHOOL, 101 N. Parkside Road, Normal, IL 61761, at south side Mechanical Room.**
- C. Each Bidder, by submitting his bid, represents that he has so examined the bidding documents and inspected the site and premises, that he understands the provisions of the bidding documents, and that he has familiarized himself with the local conditions under which the work is to be performed. Bidders will not be given extra payment or contract time for conditions, which could have been determined by such examination.

1.17. BIDDER QUALIFICATIONS

- A. Competency and responsibility of the Bidder, and of their proposed subcontractors, will be considered prior to award and may include:
 - 1. A detailed statement regarding the business, technical organization and plant facilities for the work that is contemplated.

2. Evidence of successful experience of personnel and previously completed construction projects.
 - a. Contractor and personnel, five years or more commercial construction experience, including recent projects or similar or greater value, similarity of types of work, technical content, and complexity.
 - b. Evidence that such projects have been aggressively pursued to conclusion without delay, frivolous claims for additional costs, or work requiring abnormal or extensive corrections.
- B. The Owner may reject a bidder, if an updated financial statement prepared by a CPA not in the Contractor's payroll (bearing the CPA's live signature) shows the net worth of a Contractor to be less than 25% of the Contractor's bid including elected alternates for this work. Said statement, if required by the Owner, shall be furnished and paid for by the Bidder.
 1. Evidence of unpaid bills, unresolved liens, outstanding claims by the Dept. of Labor for wage, benefits or workman compensation violations or failure to provide accurate payroll information may be used to determine responsibility of Contractor prior to award.

1.18. LIST OF SUBCONTRACTORS

- A. **AT THE TIME OF BIDDING** the Contractor shall submit to the Architect/Engineer, a list of the names of the subcontractors and suppliers and other persons or organization as outlined in specification page 00300-4 subject to the approval of the Owner.
- B. After the Contractor's list of subcontractors and material suppliers has been submitted, no further changes shall be made without specific written authority and approval of the Architect/Engineer.

1.19. CONTRACT AWARD

- A. The Owner will make an award based on the selection of the lowest cost responsible bidder. After award is approved by the Board of Education, the contract timeline is as follows:
 1. The Architect will fill in the Contract Form of Agreement (specification section 00301-2). The Architect will obtain the signature of the person designated by the Board of Education.
 2. The Architect will send three (3) Forms of Agreement, and the Contractor shall sign all, keep one (1) for their file, send two (2) back to Architect. This shall happen within seven (7) calendar days of the date of award.
 3. When the Contractor has signed both copies of the Form of Agreement, the project starts.
 4. The Contractor shall immediately obtain Proof of Insurance, Labor and Materials, Payment and Performance Bonds. All of the above

- to be completed fifteen (15) days after award.
- 5. Master Cost Breakdown (CVS), thirty (30) days after award.
- 6. Proposed Schedule and timeline: Contractor to present at Pre-Construction meeting, fifteen (15) days after award.
- 7. Contractor to send Shop Drawings and Catalog Cuts/Samples or bring same to Pre-Construction meeting.

B. Failure or refusal to provide the preceding Contract information in a timely manner may be cause for cancellation of the award or termination of the agreement if signed and the Owner will be entitled to compensation under the terms of the Bid Security for failure to execute contract terms in good faith.

1.20. SCHEDULING

A. Contractors' Master Schedule

- 1. The Contractor shall prepare and maintain a Master Schedule, including the work of all sub contractors.
- 2. Upon preparation of a detailed schedule, same shall be reviewed by the Architect and the Owner. Once accepted, it shall become the basis for determining the on time progress of the work.
 - a. Provide manpower crews, overtime double shift, and equipment as needed to maintain the schedule. The Owner will not authorize additional payment for overtime or additional manpower needed to maintain, achieve, or make up time to meet the schedule. The General Contractor shall notify the Architect and the Owner promptly of any deficiency in performance, which is unacceptably impacting the schedule or delaying progress, and provide a plan of action to regain performance to meet the schedule.

B. Schedule

- 1. Submittals shall be prepared immediately following award.
- 2. Material acquisition may begin immediately following Award.
- 3. Upon return of review submittals, schedule material and equipment for timely delivery.
 - a. Materials and equipment delivered on site or suitably stored with proof of insurance may be submitted for payment, subject to inspection.
 - b. The Owner requests that equipment and materials to do the work be on site or readily available for delivery prior to the start of operations.

C. Manning the work

- 1. Contractors shall work full crews each day once the project has been started until complete.

1.21. ALLOWANCE

- A. **The General Contractor shall include in his bid an allowance of \$17,000 for additional time and material or Change Order work as directed and approved IN WRITING by the Owner and A/E. \$17,000 to be added to the base bid.**
 - 1. This is for unforeseen conditions.
 - 2. Unused portion of allowance will be returned to Owner at the conclusion of the work via Change Order or deducted on final Pay Request.
- B. This is not for assignment or use by the Contractor or Subcontractors for any work that either perceives as additional effort unless the Owner is in concurrence IN WRITING.

1.22. PROGRESS PAYMENTS

- A. Pay Requests must be approved by the Architect / Engineer and the District Maintenance Supervisor, Doug Johnson. Submit all Pay Requests to the Architect, five (5) business days before the end of each month. Pay Requests will be accepted once per month.
- B. Payment will be made within thirty (30) days following approval.
- C. In accordance with the terms of the Contract periodic partial progress payments may be made monthly to the Contractor for: 90% of the value of the labor, materials, and/or equipment incorporated in the construction. Payment will be for installed materials only.
- D. After Contract award and before commencement of work, the Contractor shall submit a complete master cost breakdown. Said cost breakdown shall be used by the Owner only for the purpose of checking and certifying requests for payment.
- E. Pay requests shall indicate amounts completed of all items listed from the master breakdown.
- F. Submit notarized Contractor's affidavits with each pay request showing that total owed on Contract by Owner (after subject request has been paid to Contractor) is more than the amount to become due the Contractor for material, subcontractors and labor.
 - 1. 10% of each request will be retained by Owner until work has been satisfactorily completed. After 75% of the Contract has been satisfactorily completed retainage reduction will be considered.
- G. All the applications for payment shall be made in two (2) copies with all copies bearing live seals and signatures, notarized and complete and accurately filled in.

1. See AIA General Conditions, Paragraph 9.3.1, 9.3.2 and 9.3.3.
2. Applications for payment shall be submitted to Architect/Engineer on AIA G-702A Forms.
3. EACH SUCCESSIVE PAY REQUEST SHALL BE ACCOMPANIED BY PARTIAL WAIVERS OF LIEN, DOLLAR FOR DOLLAR MATCHING THE PRECEDING PAY REQUEST.
4. Attach one (1) copy of Contractor's Payroll with Pay Request in accord with Dept. of Labor requirements. Include Payroll for the major Subcontractors and upon request any minor or intermittent on-site Subcontractor.

1.23. CHANGE ORDERS

- A. Changes to the scope of work may occur after Contract Award. Contractor may initiate a Change Order by send an RFI to the Architect. The Architect and Owner may initiate a Change Order by verbal or written inquiry to the Contractor.
- B. When a change to the scope must occur, the following procedure shall apply:
 1. The Change Order may be indicated as a fixed price or time and material. In all cases a written summation of work to be done shall be submitted to the Architect or written by the Architect. In all case the Contractor shall be provided a signed Letter to Proceed before accruing any expenses toward the Change Order.
 2. The Architect will try to provide the Letter to Proceed within twenty-four (24) hours of the time of origination of the request.
- C. Cost of Change Orders
 1. Cost of Change Orders shall be broken down into Labor, Material and Mark-up.
 2. The mark-up will include a percentage of the cost of Labor and Material and shall include everything (bonds, insurance, project management, overhead and profit, etc.). Mark-up allowed is:
 - a. Prime Contractor on own labor and materials – maximum 15%.
 - b. Subcontractor on own labor and material – maximum 15%.
 - c. Prime Contractor on labor and material of Subcontractor – maximum 7.5%.
 - d. Change Orders may be by T & M with above add-on.

- 1.24. FINAL PAYMENT: The final application for payment shall not be made until all work and deficiency (punch list) items have been satisfactorily completed and approved by the Architect/Engineer for documents compliance.

- A. Contractor to submit Operation Manuals and Warranty Documents to Architect, prior to Final Payment.

1.25. MATERIALS SPECIFIED AND QUALITY OF WORK

- A. Materials shall be as specified or approved equal.
 - 1. Due to the previously completed reroof at other District Schools the products and materials used therein are the basis for the Specification Sections to follow. Substitutions may be proposed on Specification Section 00307 Products Substitutions Form.
- B. "Approved equal" and "or equal" shall mean that the Contractor shall be required to receive the Owner's approval (via the Architect) on any substitute materials seven (7) days prior to the bid due date.
- C. Requests for substitution approval shall be submitted to the Architect/Engineer seven (7) calendar days before Bid Date.
 - 1. Prior to considering substitutions, the Owner (via the Architect/Engineer) may require submission of samples, descriptive, technical and catalog data and lab reports of tests.
 - 2. Said submittals shall be presented to Architect/ Engineer.
 - 3. Approved substitutions can then be put on Bid Form.
- D. Substitute materials may be submitted after seven (7) day period indicated above by using the Product Substitution Form 00307.

1.26. TOBACCO AND ALCOHOL FOR CONSUMPTION PRODUCTS

- A. Smoking, chewing, etc. of ANY tobacco or medical marijuana shall not be permitted anywhere on school property by State Statute.
- B. Alcoholic beverages are not allowed on school property.
 - 1. Working under the influence of anything containing alcohol or any prescription or non-prescription drug is not allowed on the job site.
- C. Violators may be removed from the job sites subject to conditional return privileges in the future.

1.27. SEXUAL HARASSMENT POLICY

- A. The Owner will not tolerate sexual harassment in any form. Sexual harassment is defined, for the purpose of this policy, as "unsolicited, deliberate or repeated sexually derogatory statements, gestures or physical contact, which cause discomfort or humiliation. Sexual harassment may involve pressure from a person of either sex against a person of the opposite sex or same sex . . ."
 - 1. Should evidence that a Contractor, or a Contractor's employee, has

harassed a student or other individuals, the harasser shall be removed from the job site.

1.28. EMPLOYEE-STUDENT RELATIONSHIPS

- A. Except in an emergency situation involving safety, intermingling of the Contractors' employees and the school faculty, staff and students is to be avoided. Contractor or Subcontractor personnel violating this requirement shall be removed from employment at this site. The Contractor Superintendent shall monitor this to the best of his ability. Contractor employees experiencing problems with students or faculty shall report same to their Project Superintendent, who shall promptly report the problem to an authorized representative of the Owner and the Architect/Engineer.
 - 1. Avoid profanity and inappropriate subject matter in conversation as students and staff may be within audible range and walls or ceiling spaces may allow sound transmission.
 - 2. Verbal or physical action interpreted as sexual in nature or as sexual harassment will be grounds for removal of the employee. Further legal action remains the option of the persons affected.
 - 3. In all aspects of this provision, the Contractor's employees as adults have the greater responsibility and should not respond to inappropriate student behavior.

1.29. BACKGROUND INVESTIGATION AND SEX OFFENDERS ON SCHOOL GROUNDS

- A. Illinois Criminal Background checks are applicable to this Contract. The Contractor or subcontractor shall only send construction workers to the site that have successfully passed an Illinois Criminal Background check, per 105 ILCS 5/10-21.9 and 105 ILCS 5/14-7.02
- B. The Contractor shall provide:
 - 1. Prior to start of work; maintain a list available to the Owner of all the employees who will be or are anticipated will be employed on site. This list shall be updated when new persons not originally listed will be working on site. This list shall also include names of personnel employed by subcontractors.
 - a. Contractor ensures that all persons have had background check paperwork initiated and sent to: Ann Fair, Unit 5 Maintenance Office, 1999 Eagle Road, Normal, IL 61761: Tel: 309-557-4100 or Fax: 309-557-4537.
 - 2. Persons temporarily on site such as truck drivers or employees making deliveries do not need to be listed, but the Owner reserves the right to request a background check.
 - 3. Provide an affidavit to the Owner that the Contractor or his subcontractor has performed an ISP background check by name

on all personnel on site.
4. Copies of employee lists and affidavits shall be promptly provided to the owner upon request.

C. The Contractor shall not knowingly employ on school grounds any person who has not signed or will not sign an authorization for a criminal background check.

D. The Owner reserves the right to run fingerprint background checks on any or all employees on site, randomly or specifically, and the cost of this check will be borne by the Owner. Upon request, provide information, which will not be shared, as needed to complete checks. This may include SSN, home addresses, fingerprint, address, etc. and any alias or former names used.

E. The Contractor shall assume the responsibility to notify all on site employees or potential employees of this provision, and of the consequences of this provision.

1.30. SUBSTANCE ABUSE PREVENTION ACT ON PUBLIC WORKS PROJECTS

A. The Contractor shall comply with 820 ILCS 265 which establishes a process for Drug Abuse on Public Projects. The Contractor shall have in place a written program that meets the requirement of this Act.

1.31. PROJECT ACCESS: The Contractor shall be aware that the Town of Normal, respectively, has authority over various approach roads for site access and the Contractor is responsible to observe load limits and arrange for any exceptions to load restrictions that may be required for this project. Arrangements for road cleanup, barricades and surface patches and repairs shall comply with city requirements.

1.32. EQUAL OPPORTUNITY EMPLOYMENT: The following clause is applicable unless this Contract is exempt under the rules and regulations of the Secretary of Labor of the State of Illinois.

A. During the Performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin. The Contractor will take affirmative action to ensure that all applicants are considered and that employees are treated, during employment, without regard to their race, color, religion, sex, age or national origin."

1.33. SALES TAX

A. Materials supplied to a public school district are exempt from state sales taxes.

1. Sales tax exemption number for Unit District No. 5 is: E9994-9091-06

- B. The Contractor shall determine the extent of exemption and shall comply with the regulations established by the Illinois Department of Revenue and allow for this in his proposal.

1.34. BUILDING PERMITS

- A. This project is exempt from local permit fees associated with the construction.
 - 1. This Contractor shall fully cooperate with the local authorities and shall apply for and obtain all required permits and comply with local regulations and requirements. The fee is exempt.
 - 2. Architect will provide Drawings and Specifications to any City, Town, or Village if requested to do so.
 - 3. Architect will assist Owner in obtaining a Building Permit from the Regional Office of Education, DeWitt, Livingston & McLean Counties.

- 1.35. **PREVAILING WAGE:** The Contractor shall pay and shall require his subcontractors to pay the prevailing hourly wages for the type of work performed in the job locality as is determined by the Illinois Department of Labor pursuant to the Illinois Prevailing Wage (820 ILCS 130/.01 et. seq.) see section 00045. **Provide Certified Payroll data per Dept. of Labor and HB 188.**

1.36. ILLINOIS STEEL PROCUREMENT ACT 30 ILCS 565/1

The Contractor is to be aware that a point of origin certification to show compliance with 30 ILCS 565/1 may be requested for any steel fabricated item and shall demonstrate compliance with the law.

- A. Exemptions:
 - 1. Products costing less than \$500
 - 2. Products not produced in the United States in sufficient quantity to meet schedules
 - 3. Products purchased or produced in the United States would increase purchase cost by more than 10%

CONTRACT CHECKLIST

1.37. Proposal:

- A. Proposal Form properly filled out and signed, (live signatures)
- B. Bid Bond/Bid Security for 5% of base bid amount (live signatures)
- C. Return of documents within ten (10) working days after bid due date

1.38. Letter of Intent:

- A. Proposal & Contract Form prepared by the Architect
- B. Labor and Material Payment Bond, two copies (15 days after Award)
- C. Performance Bond, two copies (15 days after Award)
- D. Insurance Certificates, liability and hold harmless, 2 copies (7 days after Award) *
- E. Master Cost Breakdown (7 days after Award)
- F. Bar Graph Progress Schedule, copies as required (7 days after Award)
- G. Supplier List, 2 copies (7 days after Award)
- H. Subcontractors List, 2 copies (7 days after Award)

1.39. Periodic Application for Payment:

- A. Submit per the monthly scheduling, to be determined
- B. Application and Certificate for Payment, 3 copies (AIA G702A)
- C. Contractor's Affidavit, 2 copies (AIA G706)
- D. Breakdown Estimate, 3 copies
- E. Partial Waivers of Lien, 2 copies
- F. Partial Waiver of Lien from Subcontractors/Suppliers, 2 copies
- G. Updated Progress Schedule, resubmit with each pay request
- H. Contractor's payroll information per HB 188.
- I. Insurance Certificate covering materials stored off site, 2 copies

1.40. Final Application for Payment:

- A. Letter to Architect that deficiency work is complete
- B. Final Lien Waiver from the Contractor, 2 copies
- C. Final Lien Waivers from Subcontractors/Suppliers, 2 copies
- D. Final Affidavit showing \$0.00 due to Subcontractors and \$0.00 due to Suppliers, 2 copies
- E. Final Payment Approval Letter from Bonding Co., 2 copies
- F. Certification of all guarantees, 2 copies
- G. Final Application & Certificate for Payment, 3 copies (AIA G702A)
- H. Additional certifications as may be requested, 2 copies
- I. Operating manuals & instructions, 3 copies-indexed and bound

*THE OWNER AND THE ARCHITECT/ENGINEER MUST BE NAMED ADDED INSURED AND MUST BE SO LISTED ON THE CERTIFICATE OF INSURANCE.

END 00040

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS

Section 00045 – Prevailing Wage

1. GENERAL

- 1.1. This is a project requiring the payment of prevailing wages. Proper written notification as required under Public Act 96-0437:

This contract calls for the construction of a “public work,” within the meaning of the Illinois Prevailing Wage Act, 820ILCS 130/.01 *et seq.* (“the Act”). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current “prevailing rate of wages” (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department’s web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor’s website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, *including but not limited to*, all wage requirements and notice of record keeping duties.

END 00045

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS

Section 00050 - General Conditions of the Contract

1. GENERAL

- 1.1. The General Conditions of these Contract Documents are included herein by reference: AIA Document A201, 1997 Edition.
- 1.2. Copies are available for inspection and review from the Architect and will be made available upon request. Copies that are checked out of the Architect's office shall be recorded as an attachment to the documents and shall be subject to return in usable condition along with the Drawings and Specifications Booklets.
- 1.3. See Section 00800 Supplementary General Conditions.

END 00050

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS
Section 00300 – Proposal Form

1.1. WORK INCLUDES

- A. All work included on the Drawings and Specifications for Project No. 24082318 – Parkside Junior High School 2020 Partial Reroof, 101 N. Parkside Road, Normal, IL 61761.
- B. Contractor submit bid on the following pages: 00300-2, 00300-3 and 00300-4.

1.2. **Add \$17,000.00 to Base Bid as an allowance for unforeseen conditions to be added to the proposal.**

- A. **Unused portion of allowance will be returned to Owner at the conclusion of the work via Change Order or Final Pay Request.**

PROPOSAL FORM, SUBMIT WITH LIVE SIGNATURES

BID DUE DATE: **Thursday, February 20, 2020**

TIME: **9:30 a.m. (prevailing time)**

PROPOSAL TO: Joe Adelman, Executive Director of Operations
McLean County Unit District No. 5 Warehouse
1999 Eagle Rd.
Normal, IL 61761

BID FOR: **Project No. 24082318**
Specifications & Drawings Titled:
PARKSIDE JUNIOR HIGH SCHOOL 2020 PARTIAL REROOF
101 N. Parkside Road, Normal, IL 61761

SUBMITTED BY: _____

This proposal is in compliance with the documents for the: Parkside Junior High School 2019 Partial Reroof, Middleton Associates Incorporated Project Number 24082318. This proposal is made without exception to any requirements as set forth or reasonably inferred in the documents and in making this proposal, I/we agree that we are familiar with on site existing conditions, the work required, the Specifications, inclusive of DIVISION 0, 1, 2, 5, 6, 7, 9, 15 and 16, the Drawings, and all Addenda received and the extent of labor and materials necessary to fully complete the work within the time slot allowed between on site start-up and on site substantial completion. This proposal is made by the Contractor and the Contractor's signature thereto demonstrates his concurrence with the Owner's rights as advertised and restated herein as follows:

It is the intention of the Owner to accept the lowest bid received in accordance with the documents. The Owner, however, reserves the right to reject any or all bids, waive formalities and informalities as may be applicable to the bidding, and accept a bid, as deemed, by the Owner to be most advantageous to the Owner's interest.

ADDENDA: Addenda received and included (please check) #1___ #2___ #3___ #4___ #5___

BASE BID + ALLOWANCE: of _____ \$_____

5% BID SECURITY ENCLOSED

- BID BOND
- CASHIER'S CHECK

START/COMPLETION: I/We agree to provide all the labor and material in a timely sequence to allow for construction commencement at the earliest possible date after May 25, 2020 (see Section 00040) and to allow for Substantial Completion of all work on or prior to: **August 7, 2020.**

CERTIFICATIONS:

I CERTIFY THAT: All labor and wage compensation required in the execution of this contract and provided by this contractor or his subcontractors will comply with the Illinois Prevailing Wage (820 ILCS 130/01 et. seq.) see <http://labor.illinois.gov/>.

I CERTIFY THAT: This proposal is made without any connection with any person making another bid for the same contract, that the bid is in all respects fair and without collusion or fraud, that no member of the Board of Education, officer thereof, or any person in the employment of designated school district is directly or indirectly interested in the bid or any portion of the profit therefrom, except as allowed by the Illinois School Code.

I CERTIFY THAT: I have not been barred from bidding on a contract involving public funds as a result of a conviction for either bid rigging or bid rotating or other violation under Article 33E Criminal Code of the Illinois Revised Statutes, or convicted of a felony pursuant to the Illinois Procurement Code, Section 50-10.

I AGREE to provide a drug-free workplace as required by the Illinois Drug-free Workplace Act. I, the undersigned, do hereby certify that I am either the bidder or duly authorized agent of the referenced bidder, and I am authorized to execute the certifications hereon.

I AGREE to comply with applicable provisions of the Illinois Human Rights Act (775 Illinois Compiled Statutes 5), the U.S. Civil Rights Act, the Americans with Disabilities Act, Section 504 of the U.S. Rehabilitation Act and the rules applicable to each. The equal opportunity clause of Section 750.10 of the Illinois Department of Human Rights Rules is incorporated herein. Contractor/vendor shall comply with Executive Order 11246, entitled "Equal Employment Opportunity", as amended by Executive Order 11375, and as supplemented by U.S. Department of Labor regulations (41 C.F.R. Chapter 60). Contractor/vendor agrees to incorporate this clause into all Subcontracts under this Contract.

I CERTIFY THAT: By submission of this proposal the bidder confirms that he is familiar with the site, existing conditions, the Bid Documents and the project schedule. **Project Substantial Completion by August 7, 2020. Project final acceptance by August 21, 2020.**

EXPIRATION OF PROPOSAL - I/We agree that this proposal shall be binding for a period of thirty (30) days following the bid due date set forth in the advertisement for bids.

SUBMITTED BY: _____

SIGNED BY: _____

CORPORATE SEAL
(for corporations only)

SUBCONTRACTOR LIST:

PLUMBING _____

ELECTRICAL _____

HVAC _____

CARPENTRY _____

METAL WORK _____

PAINTING _____

END 00300

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
Section 00301 – Form of Agreement

1 GENERAL

- 1.1. The following Agreement (00301-2) will be filled out by the Architect after the bidding process and sent to the Owner and Contractor for signature.

OWNER-CONTRACTOR FORM OF AGREEMENT

Between:

The Owner: McLean County Unit District No. 5
1999 Eagle Rd.
Normal, IL 61761

And the Contractor: _____

For the Project:

**PARKSIDE JUNIOR HIGH SCHOOL 2019 PARTIAL REROOF
MCLEAN COUNTY UNIT DISTRICT NO. 5**

The Owner and Contractor agree to enter into a contract in accordance with the terms and conditions of the Documents (Plans & Specifications), A/E Project Number 24082318 and the Contractor's Proposal dated **February 20, 2020**, which become the Contract for completion of the project as follows:

Base Bid Substantial Completion Date: August 7, 2020; Final Acceptance – August 21, 2020

Additional Terms & Conditions: None (or as applicable)

Addenda: #1 _____ #2 _____ #3 _____ #4 _____ (list as applicable)

Contract Amount: (to be listed as appropriate)

Base Bid Proposal	\$ _____
Alternate Bids as awarded to be listed	\$ _____
Total Contract Amount	\$ _____

(Written) _____ **dollars**

Date of Agreement: February 20, 2019

Signatures:

Owner:
McLean County Unit District No. 5

Contractor:

Contractor's Seal
(Corporation Only)

END 00301

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
Document 00307 - Product Substitution Form
Voluntary Alternate Form

The Bidder should include this form with the Bid Forms if a material substitution is offered at that time.

The Base Bid and Alternate Bids include only those products specified in the bidding documents. Following is a list of substitute products which bidder proposes to furnish on this project, with the difference in price being added to or deducted from the Base Bid or Alternate Bids.

Bidder understands that acceptance of any proposed substitution is at Owner's option. Approval or rejection of any substitutions listed below will be indicated prior to executing the Contract.

<u>MANUFACTURER'S NAME AND PRODUCT</u>	<u>ADD OR (DEDUCT)</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

<u>VOLUNTARY ALTERNATE DESCRIPTION</u>	<u>DEDUCT</u>
_____	_____
_____	_____
_____	_____

EVALUATION Contract award will be made in accord with Instructions To Bidders. Only the lowest responsible bidder's Proposed Product Substitution Form will be evaluated.

BIDDER'S NAME: _____

TRADE: _____

END 00307

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS
Section 00800 – Supplementary General Conditions

GENERAL

1.1. AUTHORITY

- A. The conditions outlined in this and following paragraphs are to supplement and complement the conditions found in the Articles of the AIA Document A201, 1997 Edition, included in these Specifications by reference as AIA Document A201 General Conditions. This Section (00800) supersedes the previous articles in areas of conflict only and further delineates conditions applicable to this project.

1.2. SIGNING OF DOCUMENTS AND INSTRUMENTS

- A. All documents shall be signed by persons fully and duly authorized to so sign. Any documents signed by a person other than person prescribed by the Contractor's legal organization shall enclose with his signature the evidence of "Power of Attorney."

1.3. SUPPLEMENTS TO AIA DOCUMENT A201 (1997 EDITION) THE GENERAL CONDITIONS OF THE CONTRACT

A. TO ARTICLE 2/OWNER

1. To Subparagraph 2.2.2, add 2.2.2.1
2. Easements off site required by the Contractor to execute the work, such as space for storage, access, lane enclosure, etc., shall be arranged and paid for by the Contractor.
3. To Subparagraph 2.2.4, change the wording in the second sentence of subparagraph 2.2.4 from "any other information, etc." to read "any other **essential** information, etc."

B. TO ARTICLE 3/CONTRACTOR

1. To Subparagraph 3.3.1, delete the last two (2) sentences listed under 3.3.1 in their entirety and insert "if the Contractor determines that such means, methods, techniques, sequences or proceedings may not be safe, or may not be appropriate to the equipment and task as becomes apparent, then said Contractor shall submit a revised plan for which he can take responsibility.
2. Add Subparagraph 3.12.6.1
 - a. 3.12.6.1 Submittals unmarked will not be reviewed at the Architect's option. Said unmarked submittals may be returned to the Contractor for re-submittal and the time loss shall not extend the time of completion of the project.

C. TO ARTICLE 4/ADMINISTRATION OF THE CONTRACT

1. To paragraph 4.3.10, add 4.3.10.3 as follows:
 - a. 4.3.10.3 This waiver of consequential damages extends only to the extent of the Contract scope and schedule.
2. To paragraph 4.6, subparagraph 4.6.1, revise the word shall to may (if both parties agree to mediation).
3. To paragraph 4.6, subparagraph 4.6.2, in the first sentence, change the word shall to may (if both parties agree to arbitration).
4. To paragraph 4.65.3, add subparagraph 4.5.4.1 as follows:
 - a. 4.6.4.1 Should mediation be requested by one party to the construction contract and rejected by the other, the claimant may seek satisfaction through the appropriate court jurisdiction.

D. TO ARTICLE 5/SUBCONTRACTORS

1. Add Paragraph 5.2.5:
 - a. 5.2.5 The assignment of work by the Contractor to Subcontractors is the election of the Contractor and in no way changes or reduces the Contractor's obligations under the Contract to properly complete the work and/or provide clear title to the work.

E. TO ARTICLE 7/CHANGES IN THE WORK

1. To Subparagraph 7.1.2, add subparagraph 7.1.2.1 and 7.1.2.2 as follows:
 - a. The Contractor and/or his Subcontractor shall not proceed with any work, directive or change for which he intends to claim extra cost without providing written notice to the Architect.
 - b. The Architect and Owner shall provide response to claims for additional cost within a reasonable time period upon receipt of notice or quote.
2. To Paragraph 7.2.2, add subparagraph 7.2.2.1 as follows:
 - a. Change Order quotes shall be based on an approved quote or estimate which shall be based on labor and material cost, actual or estimated as prior agreed upon, and:
 - b. Overhead and profit proportional to this category on the Contractor's CSV, but not exceeding fifteen percent (15%) for the Contractor's own work forces or ten percent (10%)

Subcontractor, ten percent (10%) Contractor, twenty percent (20%) total for work completed under a Subcontractor arrangement.

3. Field personnel for supervision and General Conditions allowance(s) not exceeding the proportional value shown on the Contractor's CSV for the entire project.

F. TO ARTICLE 9/PAYMENT AND COMPLETION

1. To Subparagraph 9.6.1, add Subparagraph 9.6.1.1:
2. Wherein the Owner is governed by a public Board, payment requests must be received twelve (12) days prior to the next regular Board Meeting. Payments will be made within fifteen (15) days following Board approval. Failure to comply with schedule will result in a one (1) month delay in payment.

G. TO ARTICLE 10/PROTECTION OF PERSONS AND PROPERTY

1. To paragraph 10.2.1, add Subparagraph 10.2.1.4
 - a. 10.2.1.4 The Contractor shall be responsible to provide and maintain on site MSDS Sheets for all paints to be brought on site.

H. TO ARTICLE 11/INSURANCE & BONDS

1. To Paragraph 11.1, Subparagraph 11.1.1 add the following subparagraphs
 - a. 11.1.1.9: Required coverage shall include the following under General Liability:
 - 1) Comprehensive Form
 - 2) Explosion & Collapse Hazard
 - 3) Products Completed Operations Hazard
 - 4) Broad Form Property Damage
 - 5) Premises Operation
 - 6) Contractual Insurance
 - 7) Independent Contractors
 - 8) Personal Injury
2. The Contractor expressly agrees that he is in charge of and in control of the Work and he shall have sole exclusive responsibility to direct the work processes and comply with the requirements of OSHA, State and Federal regulations for scaffolding, barriers and supports. Neither the Owner nor the Architect is in charge of the means, methods and procedures employed to construct the Work. The obligation of the Contractor shall include, but not be limited to injury or damage resulting from failure to use or misuse scaffolding, hoists, cranes, stay ladders, support of other mechanical

contrivance erected or constructed by a person or any or all other kinds of equipment whether or not owned or furnished by Contractor. The Contractor expressly agrees that he is exclusively responsible to compliance with OSHA and local regulations for construction and that he is the “employer” within the meaning of those regulations. Any provision in the Contract Documents in conflict with this paragraph shall be superseded this subparagraph.

3. Minimum Limits of Liability for preceding coverage in paragraphs 11.1 and subparagraphs therefollowing.
 - a. Workers Compensation - Statutory Limit
 - b. Personal Injury - \$2,000,000 per person, \$5,000,000 aggregate
 - c. Property Damage - \$2,000,000 per occurrence, \$5,000,000 aggregate
4. Insurance coverage limits may be accomplished either through the primary carrier or primary plus an umbrella carrier.
5. In the event that a claim is filed or a settlement reached whether related to this project or not which compromises the aggregate limits of liability then the Owner and Architect shall be notified and arrangements shall be made to provide additional insurance as needed to keep aggregate limits in force for the remainder of the Contract.
6. Contractor's insurance shall be maintained in force through basic warranty - guarantee periods, not less than one (1) year.
7. With respect to all insurance required herein, the Contractor shall provide such insurance naming the Owner and its employees and agents, the Architect and Architect's consultants, as additional insured, named insured or provide separate Owner's protective insurance which names Owner, Architect and Architect's Consultants, including coverages with respect to damages, losses, expenses and claims, including attorneys' fees, for all liability based upon any claims brought against the Owners, its employees or agents and the Architect, by any party, the Contractor or any Subcontractor, material men or suppliers or the employees thereof, arising from whatsoever cause, relating to arising out of or concerning the performance of the subject project.

I. TO ARTICLE 11/INSURANCE & BONDS

1. To Paragraph 11.4, add Subparagraphs 11.4.2 and 1.4.3 as follows:

- J. The Owner's property and vandalism insurance has \$1,000 deductible. The Contractor shall insure and thus pay the costs not covered by deductibles.

K. The Owner's Builder's Risk will cover only normally included risks, on site, Owner's interest only, excluding tools and property of the Contractor and improperly stored materials.

1. To Paragraph 11.5.1 add the following Subparagraphs:

a. The Contractor shall furnish Performance and Labor and Material bonds covering the faithful performance by the Contractor of the work specified in accordance with the plans and specifications and according to the time and terms and Conditions of the Contract, and also that the Contractor shall properly pay all debts incurred in the prosecution of the work, including those for labor and materials furnished. The cost of each bond shall be included in the Contract Sum plus any changes to the Contract Sum. The Contractor shall include in all bonds provisions as will guarantee faithful performance of the prevailing wage provisions of the Contract. Bonds shall be written by surety, approved by Owner, with a minimum rating of B or better, Financial Class V, or higher, in A.M. Best's Insurance Guide, current edition. The company must also be licensed in the State of Illinois.

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

2. The Contractor shall deliver the required bonds to the Owner not later than fifteen (15) days following the date the agreement is executed.

L. TO ARTICLE 12/UNCOVERING AND CORRECTION OF WORK

1. Add Paragraph 12.4 WARRANTIES, and the following Subparagraphs:

a. 2.4.1 General. The Contractor warranty that all work provided under the Contract will be in conformance with the Contract and free from defects in workmanship, materials, and equipment for a period of one (1) year or such longer period as may be specified in the Contract Documents, except as provided below. Warranty time periods shall commence with the date of Owner acceptance of the Certificate of Substantial Completion of the whole, or any part of the project. The warranty time period for any incomplete or uncorrected work at the time of Substantial Completion shall commence with the date of Final Completion.

b. 12.4.2 Extended Warranties. The responsible Contractor

warrants that its workmanship, material and equipment for those building systems subject to seasonal loads will be in conformance with the Contract and free from defects for a period of two (2) years, commencing with the date of the Certificate of Substantial Completion. This includes, but is not limited to, heating, ventilating, air conditioning, temperature control and test and balance work, as specified in the project manual.

2. Latent Defects. On demand, the Owner at any time within the ten (10) year period following Substantial Completion or Final Acceptance, if applicable, the Contractor shall promptly repair or replace all defective or non-conforming work resulting from, or constituting latent defects, fraud, fraudulent concealment or gross negligence. The Owner will give timely notice of such defects.
 - a. 12.4.4 Prompt Repair. Upon notice from the Owner or Architect of such defects or nonconforming work, the Contractor shall promptly visit the site in the company of the Owner's representative to determine the extent of all defects or nonconforming work. The Contractor shall provide all labor, material and equipment to promptly repair or replace the defective or nonconforming work. The repair shall include all adjacent work not necessarily provided by the Contractor, but damaged as a result of such defects or non-conforming work or as a result of remedying them. If the Contractor does not promptly repair or replace defective or non-conforming work, the Owner may repair or replace such work and charge the cost thereof to the Contractor. Work which is repaired or replaced by the Contractor shall be inspected and shall be warranted by the Contractor in accordance with this Article. The warranties set forth herein are in addition to all warranties or guarantees expressed or implied by operation of law, statute or ordinance.
3. Commercial Warranties. The Contractor shall deliver all commercial and extended warranties received from manufacturers to the A/E prior to Final Completion, but this shall not reduce the Contractor's obligations under this Article.

M. TO ARTICLE 13/MISCELLANEOUS PROVISIONS

1. Add Subparagraph 13.1.2
 - a. 13.1.2 The Contractor shall, to the best of his knowledge and capability, perform all work encompassed by the documents, in compliance with the Environmental Barriers Act (Ill. Rev. Stat. 1985, ch. 111-1/2, pars. 3711 et seq. as amended), the Illinois Accessibility Code, 71 Illinois Administrative Code 400; The Uniform Federal Accessibilities Standards (UFAS); Section 504 of the

Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 (effective January 26, 1992) known as ADA requirements. This obligation shall apply to the contractual work described as the project and the conduct of work processes initiated to accomplish the work.

2. Add Subparagraph 13.1.3
 - a. The Owner and other parties to this Contract are subject to the rules and regulations of the Illinois Department of Human Rights and the statutory requirements thereof, including the requirement that every party to a public contract shall have adopted written sexual harassment policies (PA 87-1257).
3. Add Subparagraph 13.1.4
 - a. It shall be mandatory that the Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry, age, marital status, physical or mental disabilities.
4. Add Subparagraph 13.1.5
 - a. Illinois Department of Labor requirements. It shall be mandatory upon the Contractor to whom the Contract is awarded and upon any Subcontractors thereof to pay all laborers, workmen, and mechanics employed by them not less than the prevailing wages in the locality for each craft or type of workman or mechanic needed to perform such work and the general prevailing rate for legal holidays and overtime work as ascertained by the Illinois Department of Labor and pursuant to Illinois law and statutes in such case made and provided.
5. Add Subparagraph 13.1.6
 - a. The Contractor and Subcontractors shall comply with the Illinois Prevailing Wage Act and shall include in Bids the cost for the current prevailing wage. A copy of the current Illinois Department of Labor Prevailing Wages for applicable County is included at the end of Section 00040 of these Specifications. As changes are made in these prevailing wages, the Contractor and Subcontractors performing work on the project will be responsible for conforming to the changes and shall have the responsibility for determining when changes are made. No additional costs are to be incurred by the Owner as a result of changes in the prevailing wage. All record keeping requirements are the obligation of the Contractor and Subcontractors.

6. Add Subparagraph 13.1.7
 - a. To the extent that there are any violations of this Act and any demands are made upon the Owner or Architect by the Illinois Department of Labor or by any employee of the Contractor or Subcontractor performing work on the project, the Contractor or the particular Subcontractor and Contractor shall be responsible for indemnifying and holding both the Owner and Architect free and harmless from all costs incurred, directly or indirectly, by the Owner or Architect in responding to and complying with demands made by the Department of Labor, or an aggrieved employee and such amounts may be withheld from the payments to be made on the project. It is the intention that the Owner and the Architect shall suffer no time loss or other additional expenses in complying with any inquire made with regard to this Act.

7. To Paragraph 13.3.1 add Subparagraphs 13.3.1.1 and 13.3.1.2 as follows:
 - a. Notice served by facsimile (fax) to facsimile number used during bidding and construction shall be official written notice.

 - b. 13.3.1.2: The Bidder shall notify the Architect and/or the Owner at time of securing of bid documents of: Contractor's contact person's address, telephone number, and fax number and promptly notify the Architect and/or Owner of any change during the execution of the work and one (1) year thereafter.

N. TO ARTICLE 14/TERMINATION OF THE CONTRACT

1. To 14.2.1 Subparagraph, add Subparagraph 14.2.1.5:
 - a. If the Contractor shall institute proceedings or consent to proceedings requesting relief or arrangement under the Federal Bankruptcy Act or any similar or applicable federal or state law, or if a petition under any federal or state bankruptcy or insolvency law is filed against the Contractor and such petition is not dismissed within sixty (60) days from the date of said filing, or if the Contractor admits in writing his inability to pay his debts generally as they become due, or if he makes a general assignment for the benefit of his creditors, or if a receiver, liquidator, trustee or assignee is appointed on account of his bankruptcy or insolvency, or if a receiver of all or any substantial portion of the Contractor's properties is appointed, or if the Contractor abandons the Work, or if he fails, except in cases for which extension of time is provided, to prosecute promptly and

diligently the Work, or to supply enough properly skilled workmen or proper, materials for the Work, or if he submits and Application for Payment sworn statement, waiver of lien, affidavit or document of any nature whatsoever which is intentionally falsified, or if he fails to make prompt payment to Subcontractors or for materials or labor or otherwise breaches his obligations under any subcontract with a Subcontractor, or if a mechanic's or material man's lien or notice of lien is filed against any part of the Work or the site of the Project and not promptly bonded or insured over by the Contractor in a manner satisfactory to the Owner or if the Contractor disregards any laws, statutes, ordinances, rules, regulations or orders of any governmental body or public or quasi-public authority having jurisdiction of the Work, or the site of the Project, or if he otherwise violates any provision of the Contract Documents, then the Owner, without prejudice to any right or remedy available to the Owner under the Contract Documents or at law or in equity, may after giving the Contractor and the surety under the Performance Bond and under the Labor and Material Payment Bond described in Paragraph 11.4, seven (7) days' written notice, terminate the employment of the Contractor. If requested by the Owner, the Contractor shall remove any part or all of his equipment, machinery and supplies from the site of the Project within seven (7) days from the date of such request, and in the event of the Contractor's failure to do so, the Owner shall have the right to remove or store such equipment, machinery and supplies at the Contractor's expense. In case of such termination, the Contractor shall not be entitled to receive any further payment for Work performed by the contractor through the date of termination. The Owner's right to terminate the Owner-Contractor Agreement pursuant to this Subparagraph 14.2.1.5 shall be in addition to and not in limitation of any rights or remedies existing hereunder or pursuant hereto or at law or in equity.

END 00800

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
Section 00860 - Drawings Index

1. GENERAL

**1.1 SCHEDULE OF DRAWINGS – PARKSIDE JUNIOR HIGH SCHOOL 2020
PARTIAL REROOF**

T-1 TITLE SHEET – JOB INFORMATION

C-1 PJHS – SITE PLAN

G-1 PJHS – PHOTO GALLERY

R-1 PJHS – PLAN & DETAILS

R-2 PJHS – DETAILS

R-3 PJHS – ORIGINAL 1972 ROOF PLAN (REFERENCE)

END 00860

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Base Bid: Parkside Jr. High School: The roof area to be replaced is the full total roof area approximately 53,420 sq. ft. (Contractor verify.)
 - 1. Provide roof demolition and repair as noted on the Drawings. Existing insulation to remain in some areas and removed in other areas.
 - 2. Provide removal and reinstallation of mechanical equipment to increase curb height to 8” or as required to meet warranty.
 - 3. Provide protection of all new materials stored on site from damage caused by weather.
 - 4. Provide new roof and insulation material as indicated on the Drawings and Specifications. All areas to have cover board adhered to top layer of insulation.
 - 5. Provide new sheet metal and components as indicated on Drawings.
 - 6. Provide minor electrical work, plumbing work & mechanical work as shown on Drawings.

- B. By submitting a proposal pursuant to these Specifications and the Drawings, the Contractor shall have confirmed over his signature that he has verified all pertinent dimensions set forth on the Drawings and that his bid confirms that verification.

1.2. PRODUCTS FURNISHED BY OTHERS: All products, components, spaces, and equipment furnished by the Owner are currently in place.

- A. All products furnished and installed under the contract shall be new, furnished and installed by the Contractor.

- B. Contractor's Duties:
 - 1. Designate specific delivery date for each product in approved construction schedule.
 - 2. Promptly inspect delivered products, report damaged or defective items.
 - 3. Handle at site, including unloading, uncrating, and storage.
 - 4. Protect all material from exposure to elements until installation.
 - 5. Repair or replace items damaged as result of Contractor's operations.
 - 6. Install, connect and finish products in assembly function ready.

1.3. WORK SEQUENCE

- A. McLean County Unit District No. 5 will occupy the facilities until **June 1, 2020**. (This date may be as early as May 26, 2020, depending on snow

days). The Owner will occupy the building after **August 15, 2020**.

1. The Contractor may start work as early as May 26, 2020, (if no snow days are used), and as late as June 2, 2020. This will be discussed at the Pre-Construction meeting.
2. Install proper safeguards to protect building occupants both inside and outside the building and with safeguards in place to control noise and dust.

B. Coordinate with the school building administrator and with the District Executive Director of Operations, Joe Adelman, 309/557-4101.

1.4. CONTRACTOR USE OF PREMISES

A. Confine operations at site to areas permitted by laws and this Contract.

1. Coordinate activities at the project with the Owner's Representative (chief administrator at each building).

B. Do not unreasonably encumber site with materials or equipment. Do not block the Owner's pedestrian traffic patterns except as prior arranged with the Owner's approval.

C. Do not load structure with weight that will endanger structure. See Section 01620.

D. Assume full responsibility for protection and safekeeping of products stored on premises. See Section 01620.

E. Move all stored products or equipment which interfere with operations of the Owner or other contractors.

F. Obtain and pay for use of additional off site storage or work areas needed for operations.

G. Limited use of site for work and storage:

1. Use public access ONLY, now in service. Parking ONLY as prearranged with the Owner.
2. All vehicular on site activity shall have been prearranged and approved by the Owner.

1.5. CONTINUOUS OCCUPANCY BY OWNER

A. Owner will occupy areas for purposes of public education and general maintenance during construction.

B. Contractors shall provide:

1. Access for Owner's personnel and attending pupils when applicable. Summer school programs may be in session during

- some of the reroof work.
- 2. Operation of electrical and ventilation systems with a minimum of down time.
- 3. Operation of exhaust systems with a minimum of down time. Wherein ventilation systems require down time, the same shall be arranged and scheduled with school personnel.

- C. After the work is accepted by the Owner, the Owner will provide:
 - 1. Security
 - 2. General custodial maintenance

1.6. ASBESTOS

- A. This building was designed in 1971 and 1998 and built in 1972 – 1974 and 1999-2000. There is no known Asbestos on this site.
- B. The Contractor shall perform his own examination of the buildings of concern on the project prior to bidding and be responsible for the determination of the existence or nonexistence of suspect asbestos in a state that is likely to be or become hazardous to the health of the Contractor, his employees, his subcontractors and their employees.
- C. The Contractor may deem it advisable to contact the Office of the Superintendent of Schools and request access to the Asbestos Management Survey applicable to the building pursuant to Section 855.30 (including updated amendments thereto) of AN ACT KNOWN AS THE ASBESTOS ABATEMENT ACT; P.A. 83-1325, approved and eff. Sept. 5, 1984, amended by P.A. 84-0951, approved and eff. Sept. 20, 1985, and amended by P.A. 84-1096, approved and eff. December 9, 1985, amended by P.A. 84-1245, approved and eff. July 29, 1986, amended by P.A. 84-1346, approved and eff. Sept. 10, 1986, inclusive of such amendments and regulations applicable since 1986.
 - 1. Upon determination prior to bidding, or after bidding discovery by the Contractor that heretofore unknown and untested asbestos hazardous conditions do exist in the path of execution of the work of his contract, he shall so notify the Architect IN WRITING.
 - 2. Pursuant to Item 1.6.B.1 above, the Owner (McLean County Unit District No. 5) may implement the following action:
 - a. Eliminating that portion of the work by revision and Change Order to these documents.
 - b. Instituting removal or acceptable encapsulation.
- D. Delay in the Contractor's work due to such concealed discovery and/or Owner response thereto shall not be grounds for claim for extra expense by the Contractor chargeable to the Owner as an extra to the Contract amount.

- E. It is the intent and purpose of the Owner to cooperate with the Contractor to the extent feasible under existing applicable laws and regulations and the Owner and the Contractor alike shall not construe this portion of the documents, that is, Section Paragraph 1.6. B, C, and D to the disadvantage of the other.
- F. The Contractor shall coordinate removal of ACM with the Owner's assigned environmental testing party of record. The Owner shall compensate the on site test work required, however, it shall be the duty and responsibility of the Contractor to coordinate the ACM removal work, that is, notify the Owner assigned testing party 48 hours in advance of requirement for his services and shall further exercise and organize the ACM removal work to minimize the on site time on the part of the ACM testing party. The Owner shall notify the successful contractor and identify the environmental testing party at the time of award.
- G. Should the bidding Contractor not understand the foregoing, he shall notify the Architect/Engineer for clarification prior to bidding in accord with Section 00040, Paragraph 1.15, 1.3 and 1.4 and Section 01030, Paragraph 1.1.

END 01010

DIVISION 1 – GENERAL REQUIREMENTS
Section 01030 – Alternates

1. GENERAL

1.1. DESCRIPTION

- A. Work included in alternates shall be commensurate with and in compliance with all the applicable project specifications and conditions and shall include all necessary related project adjustments and additional labor and/or material as may become apparent to complete the alternative work. No additional charge will be considered after bidding for the purposes of making additional construction or adjustments in order to accomplish alternative work that has been included in the Contract.
- B. All Base Bid requirements and material specifications and workmanship not specifically mentioned in the alternate shall apply to the alternates as is set forth therein.
- C. Incidental Work: All necessary adjustment in the work shall be made to accommodate accepted alternates.

1.2. ALTERNATE BIDS

- 1. No Alternates unless added by Addendum.

END 01030

DIVISION 1 - GENERAL REQUIREMENTS

Section 01040 - Field Engineering

1. GENERAL

1.1. SUPERINTENDENT OF THE PROJECT WORK

- A. The Contract shall designate a person who shall be the General Superintendent of on site construction work encompassed by the Contract Documents.
 - 1. Said designated superintendent shall have prior served as project superintendent of construction of similar nature and size. Qualifications shall be subject to the Owner's and Architect's review.
 - 2. Superintendent shall remain superintendent for the duration of the project unless said persons shall become disabled, no longer employed and/or the Contractor provides notice to the Architect and the Architect approves the change.
 - 3. Owner can request superintendent replacement for cause at any time

1.2. DESCRIPTION OF DRAWINGS AND LAYOUT

- A. Drawing data is intended to be reasonably accurate, however, strict accuracy in detail is not guaranteed. See Section 00040-2/1.4 A & B. The Contractor must verify all of the conditions, measurements, dimensions, rough-in requirements, piping, conduit, wiring, duct work requirements and coordination necessary for each item or piece of equipment in the Contract Documents. Verification is the Contractor's responsibility and shall be completed prior to the fabrication or installation processes. All corrections necessary to provide properly installed, finished and operable system, in accordance with the intent of the Documents, shall be made at no cost beyond the contract agreement.
- B. All measurements and conditions must be verified by actual observation at the building and the Contractor shall be responsible for all of his work fitting into place in a satisfactory and workmanlike manner in every aspect and detail subject to the approval of the Architect. The Contractor shall provide layout work and verification measurement at his own cost.
- C. Before starting his work, the Contractor shall examine all Contract Area Drawings and Specifications and if any discrepancies occur, he shall report same to the Architect IN WRITING and obtain WRITTEN INSTRUCTIONS for interpretation of the work. The Contractor shall perform all layout work pursuant to site, building, grades and levels, and furnish such engineering services as he may require to execute the intent of the work included.
- D. The Drawings are instructive and diagrammatic and shall be followed as closely as actual construction will permit. All changes from Drawings necessary to make the work of the Contractor conform to the documents shall be done at no added cost charge to the Owner above the amount

shown on the Owner/Contractor Agreement.

- 1.3. PROJECT ACCESS: The Contractor shall be aware that the Town/City, Township, County or State has authority over various approach roads for site access and the Contractor is responsible to:
 - A. Observe load limits and arrange for any exceptions to load restrictions that may be required for this project.
 - B. Make arrangements for road cleanup, barricades and surface patches and repairs shall comply with applicable regulations and be subject to the governing authority approval.

- 1.4. OVERLOADING OF BUILDING
 - A. Care shall be taken that completed structures are not overloaded during Contractor operations and the Contractor shall promptly remove all materials, which, in his opinion, may overload any part of the work. It shall not be the Owner's, or Architect/Engineer's responsibility to observe and check construction processes and temporary loading conditions that this Contractor may implement as director of his operations.
 - B. Structural design, unless noted otherwise, is designed to accommodate design loads, per code, after all bracing and construction is in place.
 1. Temporary bracing and shoring for erection loads is the responsibility of the Contractor.
 2. Bracing and shoring for loading prior to the installation of lateral support and diaphragm assemblies is the responsibility of the Contractor.
 - C. All structural damage done by overloading the system shall be repaired by the Contractor overloading the system.
 - D. The Architect/Engineer shall have no authority over the means, methods and procedures of the work and shall make no determination pursuant thereto nor render opinions concerning same.
 1. The Architect's Field Representative does not have authority to render opinions on structural questions.
 - E. The Architect/Engineer and members of his staff shall have no authority over safety conditions related to erection loads and as they relate to the Contractor's interest, shall provide no observation of same, and make no comment regarding same.
 1. The contractor shall designate an employee of the contractor as the person in charge of and responsible for safety procedures on site.

1.5. PROTECTION OF WORK AND BUILDING

- A. The Contractor shall protect all work and stored materials from injury caused by or resulting from operations under this Contract, including physical damage or weather-caused damage through the opened up areas.

1.6. MOVING OF MATERIAL

- A. Contractor materials that are temporarily located or stored shall be relocated as needed to allow access by the Contractor, other Contractors and the Owner's personnel in and around the construction area. Such moving of any material shall be at no additional cost to the Owner.
- B. At no time shall tools, materials or workmen be allowed to block an exit.

1.7. SHORING, BRACING, AND BARRICADES

- A. The Contractor shall provide, construct and finally remove all temporary shoring, bracing, underpinning, scaffolding, needling, barricades, etc. as required by local restrictions and as necessary for general safety to protect all property and persons from damage or injury. The Contractor shall determine the need for these items and shall be fully responsible for the performance or failure of them and shall make good damages caused by failure or absence of same.
- B. Specific temporary shoring, supports, etc., called for elsewhere in the Documents shall be considered a minimum but shall not override Contractor's responsibility to provide adequate shoring, if actual construction conditions and processes so dictate.

1.8. MATERIALS, WORKMANSHIP, AND LABOR

- A. All installed materials and equipment shall be new and shall be installed and completed in a first class, workmanlike manner.
- B. The Architect reserves the right to direct the removal and the replacement of any item which, in his opinion, does not present a proper, orderly or reasonably neat installation. Such removal and replacement shall be done promptly when directed by the Architect or the Owner. All installations will be subject to the Architect and Owner's inspections, tests, and approval at all times from commencement of the work to Final Acceptance of the completed Contract.
- C. Work needing correction or replacement that is not corrected with reasonable promptness shall be subject to written notice thereof by the Architect. The Contractor by virtue of having tendered his bid for the work, agrees that progress payments by the Owner may be held (no payment made) until said faults have been corrected.

1.9. CLEANING UP

- A. All surfaces shall be cleaned of any paint, plaster, mortar, gook and other stains. Care shall be taken that no surface is scratched, marred or damaged in cleaning.
- B. Damaged, marred or scratched surfaces of any type shall be made right, sanded smooth (to bright metal for metal surfaces) and primed and painted as directed or replaced if necessary to provide a final installation acceptable to the Architect.

1.10. OPENINGS IN CONSTRUCTION

- A. Openings required for construction work shall be provided by the Rehab Contractor, complete with all necessary reinforcing, lintels, trim, finishing, etc. as shall become applicable including openings required for electrical and mechanical work.
- B. Concrete slabs, joists, concrete floors, finished floors, walls and structural elements, and other structural items shall not be cut or disturbed, except as approved by the Architect IN WRITING. The Contractor shall be held responsible for and correct any such damage that he may cause.
- C. Pipes passing through floors or partitions shall have sufficient clearance around pipes to prevent damage to the adjacent finish from expansion and contraction. All sleeves, flanges and forms, etc., shall be furnished by the Contractor requiring the opening.
 - 1. A Contractor or Subcontractor penetrating a wall, floor or ceiling surface shall provide sleeves, flanges and trim to provide a finished installation.

1.11. SUPPORTS

- A. The Contractor shall provide all concrete, steel bases and anchorage except as herein specified otherwise: vibration-absorbing foundation bases, hangers, platforms, anchor bolts, etc. for all equipment which he furnishes. These foundations shall be as specified under their respective headings or shown on the drawings and/or as recommended by Equipment Manufacturer.
 - 1. All such supports which penetrate the roof shall be flashed in to meet roof material warranty requirements.
- B. Materials and installation requirements for curbs and pads shall be commensurate with the need. Concrete shall be 4,000 PSI minimum strength, installed at a slump not exceeding six inches (6"). Concrete shall not be retempered sixty (60) minutes after that time at which water was first added to the mix. Air entrainment additives shall be employed to provide a seven percent (7%) by volume air content at time of placement.

1.12. PROTECTION OF WORK

- A. The Contractor shall protect his work and adjacent existing work from injury by keeping all piping, ductwork, etc. capped, plugged, drained, or otherwise protected from injury including damage done by freezing and damage from building materials, cement and/or dirt and concrete.

1.13. MOVING OF MATERIALS

- A. Moving of in-place materials that are located or stored in the path of construction shall be relocated as needed to allow construction and construction access in and around the construction area. Relocation of said materials shall be subject to Owner approval and whereby relocation is Owner designated as temporary, a post construction final location shall be determined by the Owner. Such moving of material shall be at no additional cost to the Owner.

1.14. ELECTRICAL SERVICES TO EQUIPMENT

- A. Unless otherwise specified (see 01010 Summary of Work) the Contractor shall furnish and install electrical feeders of proper size, and furnish, install and complete all power wiring and the control wiring for each motor, electrified signage and/or piece of equipment affected by the Contract.
- B. All such electrical procedures (temporary and permanent) shall comply with the National Electric Code, whether temporary or permanent.
- C. The Contractor shall extend or install temporary electrical service for his use during construction or he shall provide his own portable generator at his own expense. Wherein the Owner's electrical services are used, extended or tapped, the current consumed shall be at the Owner's expense provided same is metered through the Owner's meter.

1.15. SEALANTS

- A. Provide sealants in all locations where shown on the Drawings or called for in the Specifications and as necessary for infiltration-tight/weathertight building envelope and good visual appearance.
- B. Sealants shall be provided in locations as directed by the Architect, where equipment components or fixtures fit to surrounds, and when cracks between equipment and surrounds are undesirable or excessive. Provide sealants in all interior locations, as necessary to properly trim out.
- C. Sealants shall be installed and tooled in strict accordance with the Sealant Manufacturer's recommendations for joint preparation, using foam rope backer bars, etc. Sealant shall be installed by the respective Contractor providing the item requiring sealant installation.
- D. See the Sealant Specification Section 07900 or consult the Architect for the type of sealant materials to be employed.

1.16. PAINTING

A. All exposed surfaces or equipment reworked and installations leaving damaged or unfinished surfaces shall be painted or have a corrosion resistant factory-applied coating or finish.

1. Aluminum and stainless steel shall not require painting.

B. Field paint unfinished equipment and surfaces for corrosion protection and visual appearance, except where clearly stated to the contrary on the Drawings.

1. No field painting in this project.

1.17. ALIGNMENT

A. The Contractor shall be responsible for supervision of the reinstallation of equipment, as applicable to these Documents.

END 01040

1. GENERAL

1.1. WORK INCLUDES

- A. Execute cutting (including excavating), filling or patching of work, required to:
 - 1. Make several parts fit properly.
 - 2. Uncover work to provide for installation of ill-timed work.
 - 3. Remove and replace defective work.
 - 4. Remove and replace work not conforming to Contract requirements.
 - 5. Remove existing construction as needed.
 - 6. Install specified work in existing construction.
 - 7. Install lintels in masonry opening cut by mechanical trades including masonry work.

- B. In addition to Contract requirements, upon written instruction of Architect/Engineer:
 - 1. Uncover work to provide for observation of covered work.
 - 2. Remove samples of installed materials for testing when required.
 - 3. Remove work to provide for alteration of existing work.

- C. Do not endanger structural work by cutting or altering steel members unless indicated on Drawings.

- D. Do not cut or alter work of another contractor without WRITTEN CONSENT of the Architect/Engineer.

- E. Where the Contractor hauls material or drives trucks or equipment over sidewalks, pavement, streets or curbs, he shall protect same from damage and where such surfaces have been damaged, he shall neatly cut out, remove and replace same. Where the Contractor damages or defaces streets, sidewalks or curbs, he shall, as a part of his Contract, re-lay all such surfaces at the same thickness and manner as the original pavement, sidewalk or curb and in a manner that will be approved and accepted by the Owner, Architect/Engineer and governing authority.

- F. The Contractor shall provide such cutting and patching as shall be needed to complete the Contract to make the various and several parts and/or components fit together.

1.2. SUBMITTALS

- A. Prior to cutting which affects structural safety to project submit WRITTEN NOTICE to the Architect/Engineer requesting consent to proceed with cutting, including:

1. Project identification.
 2. Description of affected work.
 3. Necessity for cutting.
 4. Effect on other work and structural integrity of project.
 5. Description of proposed work. Designate:
 - a. Scope of cutting and patching.
 - b. Contractor and trades to execute the work.
 - c. Products proposed to be used.
 - d. Extent of refinishing.
 6. Alternatives to cutting and patching.
 7. Designation of party responsible for cost of cutting and patching.
- B. Prior to cutting and patching to implement change order work in contract scope, done on instruction of Architect/Engineer, submit cost estimate to the Architect/Engineer.
- C. Should conditions of work or schedule indicate change in materials or methods, submit recommendation to Architect/Engineer including:
1. Condition indicating change.
 2. Recommendation for alternative materials or methods.
 3. Submittals as required for substitutions.
- D. Submit WRITTEN NOTICE to Architect/Engineer designating time work will be uncovered to provide for observation.

1.3. PAYMENT OF EXTRA EXPENSE

- A. Costs caused by ill-timed work, defective work or work not conforming to Contract Documents, including costs for additional services of the Architect/Engineer, shall be borne by the Contractor.
- B. Work done on instruction of the Architect/Engineer (by change order) other than defective or nonconforming work shall be paid for by Owner pursuant to prior written agreement via change order.

2. PRODUCTS

- 2.1. MATERIALS: Materials for replacement of work removed shall be equal to original and to match surrounds or shall comply with specifications for the type of work being replaced, whichever is the most stringent requirement.

3. EXECUTION

3.1. PREPARATION PRIOR TO CUTTING

- A. Prior to cutting
 1. Provide shoring, bracing, and support as required to maintain

- structural integrity of project or surrounds.
2. Provide protection for other portions of the project.
3. Provide protection from elements, if applicable.

3.2. PERFORMANCE

- A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances, finishes, etc.
- B. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs and new work.
- C. Execute excavating and backfilling by methods that will prevent damage to other work and will prevent settlement.
- D. Restore work that has been cut or removed; install new products to provide completed work in accord with Contract Documents.
- E. Refinish entire surfaces as necessary to provide an even finish.
 1. Continuous surfaces: To nearest intersection(s).
 2. Assembly: Entire refinishing.
- F. Refinish entire surfaces as necessary to provide an even finish.
 1. Continuous surfaces: To nearest intersection.
 2. Assembly: Entire refinishing.

END 01045

DIVISION 1 - GENERAL REQUIREMENTS
Section 01055 - Anchorage & Fastenings

1. GENERAL

1.1. DESCRIPTION

- A. Provide adequate anchorage and fastenings throughout the work commensurate with the installation conditions, and manufacturer warranties.
- B. Anchorage systems shown on the Drawings or specified herein shall be considered a minimum based on theoretical design conditions. The actual field conditions may require additional fastenings to properly accomplish the work.
- C. NOTICE:
 - 1. THESE DOCUMENTS DO NOT PERMIT THE INSTALLATION OF PLASTIC ANCHORS UNLESS SPECIFICALLY ASSIGNED.
 - 2. THE DOCUMENTS REQUIRE THAT IMPACT ANCHORAGE (DRIVEN NAILS AND PNEUMATICALLY DRIVEN ANCHORS) ARE TO BE NON-CORROSIVE TYPE, STAINLESS STEEL AND ¼" DIAMETER MINIMUM.

1.2. SUBMITTALS

- A. The Contractor shall identify all fastening systems he intends to employ, and provide specification sheets on the fasteners upon request.

1.3. QUALITY CONTROL

- A. All anchorage, fastenings and support systems are the Contractor's responsibility.
- B. All devices, components and associated parts shall be made secure against in-service failure. In no installation shall the fastenings, anchorage and support system be less than what is specifically called for on the Drawings or set forth in the Specifications.
- C. In no case, however, shall the fastenings, anchorage and support systems be less than the Product Manufacturer's recommendations pursuant to the stability of finished assembly or component thereof.
 - 1. Securing of wood framework shall be in accordance with the carpentry trade industry practice, Drawings or the recommendations of the Manufacturer, whichever is the more demanding.
 - 2. Securing of the structural steel systems, steel joists, and the decking shall be performed in accordance with industry practice, standards set forth in the specific Specifications section, the Drawings, and the recommendations of the Manufacturer,

whichever is the more demanding.

- D. The Contractor shall replace, rework, or reinforce or otherwise correct the fastenings which do not perform adequately.
- E. In general, fastening sizes and spaces are set forth on the Drawings. Wherein same are not, the Architect shall make a determination.

2. PRODUCTS

2.1. MATERIALS

- A. Generally, nails shall be appropriately selected for the service condition.
 - 1. Interior or protected framing: cement-coated box nails.
 - 2. Exterior framing: galvanized box nails.
 - 3. Interior finish work: finish nails.
 - 4. Exterior finish work: painted galvanized box nails for wood and aluminum nails for securing aluminum to wood such as cladding.
 - 5. Interior construction subject to corrosion: nails for exterior work.
 - 6. See Drawings for specific overriding designations materials and spacing limitations.
- B. Generally, screws shall be appropriately selected for the service condition to minimize corrosion, galvanic action or loosening. This includes wood screws, sheet metal screws and machine screws.
 - 1. Interior or exterior protected areas: cadmium plated screws.
 - 2. Exterior weathering conditions: stainless steel, aluminum, or brass screws. See specific designation on Drawings.
 - 3. Head type shall typically be flat head except as detailed, for conditions such as sheet metal or for equipment mounting.
 - 4. Stop bead washers, surface and/or countersunk, shall be provided wherever practical and as specifically called out.
 - 5. See Drawings for specific overriding designations materials and spacing limitations.
- C. Bolts shall be selected for the applicable service condition. In general, bolts shall be cadmium or galvanized A 307 NC thread, except as specified otherwise. Structural bolts shall be as specified. Provide washers for all bolts, and provide lock washers where appropriate. Embedded anchor bolts may be unplated, except where specified otherwise.
- D. Pop rivets may be employed only as specifically approved by the Architect. In general, pop rivets shall be aluminum alloy. Use the largest size pop rivets which can be adapted to the work.
- E. Pneumatic driven hardened steel anchors may be used where specifically approved. Provide washers.

2.2. ASSOCIATED MATERIAL REQUIREMENTS

- A. Washers shall be provided at all locations where practical.
- B. Washers shall be of like material to the fasteners selected.
- C. Use self-sealing neoprene washers at all applications required to be environment-proof.
- D. Use self-sealing neoprene washers wherever galvanic action is possible under normal circumstances. Isolate between unlike fastened material with minimum 20 mil duct tape material or similar.
- E. Select appropriately pre-finished, plated, or use base material for the visual exposure condition where fasteners are exposed to view.
- F. All exposed screws and bolts shall be coordinated with the hardware finish. In place field finish to achieve coordination with the hardware finish where necessary.

2.3. PRODUCT SELECTION

- A. Fastener materials shall be as specified previously. The most appropriate selection shall be made from the table below. The fasteners listed are not interchangeable, unless so approved by the Architect/Engineer.
 - 1. FASTENER RECEIVING MATERIAL: APPROPRIATE FASTENER
 - 2. Wood framing: cement coated nails, galvanized nails, screws, lag bolts, thru bolts.
 - 3. Steel: thru bolts, pneumatic driven fasteners, where detailed or where prior approval is made.
 - 4. Sheet metal: sheet metal screws, thru bolts.
 - 5. Masonry: embedded anchor bolts, pneumatic driven fasteners where approved, metallic expansion anchors, metallic wedge anchors, or toggle bolts.
 - 6. Concrete: embedded anchor bolts, pneumatic driven fasteners where approved, metallic expansion anchors, or metallic wedge anchors.
 - 7. Drive-pins (**NOT USED**); only detail specific if used at all.

2.4. SPECIAL ANCHORAGE & FASTENERS

- A. Self Tapping Cap Screw - Pre-Tap Drill.
 - 1. CF #14 X required length, "B" carbon structural tap seal screws.
 - 2. Counter bore wood to receive head and washer to flush.
 - 3. Tap-cons as listed on Drawings (stainless steel or high carbon).

3. EXECUTION

3.1. INSTALLATION

- A. The anchor receiving construction material shall be substantial and have the capability to withstand the in-service stress demand placed upon it.
- B. Fastener size shall be appropriate for the intended service. Verify all conditions in the field and increase the anchorage as needed.
- C. Anchorage patterns shall be appropriate to resist wiggling or prying loose during service. Use a uniform anchorage pattern for all exposed-to-view conditions; offset from centers as needed for maximum strength. A minimum of two (2) anchors shall be provided in each segment length or piece of material.
- D. Replace any fasteners which are crooked or do not properly engage the base material.
- E. Provide isolators between adjacent materials or fasteners and materials where electrolytic action is possible.

END 01055

DIVISION 1 - GENERAL REQUIREMENTS

Section 01060 - Codes & Standards

1. GENERAL

1.1. LAWS AND ORDINANCES

- A. In the execution of the work, the Contractor shall comply with Federal Laws, State Laws, Local Ordinances and regulations, rules, and requirements of the Board of Fire Underwriters.
- B. The Contractor shall make any alteration, change or addition required by the authorities having jurisdiction, as a part of his Contract and without additional cost to the Owner.

1.2. STANDARDS

- A. The fabrication and installation of all materials and all equipment furnished and installed by the Contractor shall be in accordance with standards of the industry standard technical society, organization or body.

ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AGA	American Gas Association, Incorporated
AIA	American Institute of Architects
AMCA	Air Moving and Conditioning Association
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers
ASPE	American Society of Plumbing Engineers
AWWA	American Water Works Association
EPA	State of Illinois Environmental Protection Agency
FIA	Factory Insurance Association
FM	Factory Mutual
IAC	Illinois Accessibility Code
IBR	Institute of Boiler and Radiator Manufacturers
ICC	International Code Council
IMC	International Mechanical Code

MCA	Mechanical Contractors Association
NBFU	National Bureau of Fire Underwriters
NEC	National Electric Code
NEMA	National Electric Manufacturers' Association
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Act
UL	Underwriters Laboratories, Incorporated

Illinois Rules & Regulations for Fire Prevention & Safety

Local Utility Company Regulations

Owner's Insurance Requirements

State of Illinois Department of Public Safety

State of Illinois and Local Department of Public Health

State of Illinois and Local Plumbing Codes

State of Illinois Sanitary Board

23 Illinois Administrative Code Part 185, Part 175 & Part 180

Illinois Energy Conservation Code

- B. Reference to standards shall mean adherence to the latest edition of such specifications adopted and published at the time of invitation to submit proposals.

END 01060

1. GENERAL

1.1. GENERAL TERMS USED IN THE CONTRACT

- A. OWNER: McLean County Unit District No. 5
1809 W. Hovey Ave.
Normal, IL 61761
Telephone: 309/452-4476 FAX 309/452-7418
Owner Representative: Joe Adelman, Executive
Director of Operations, phone 309/557-4101
- B. CONTRACTOR: A person, firm or corporation with whom a Contract or Agreement is made by the Owner.
- C. GENERAL CONTRACTOR: The General Contractor furnishes all of the work in the documents. Pursuant to these Documents the Designating Contractor, General Contractor and Prime Contractor shall be one and the same.
- D. ARCHITECT OR A/E: Middleton Associates, Incorporated, 1702 W. College Ave., Suite E, Normal, IL 61761 - Telephone 309/452-1271, Fax 309/454-8049
- E. DOCUMENTS: The Drawings, Specifications and signed Contract exclusively comprise the Contract Documents. The Shop Drawings are not part of the Contract Documents.
- F. TIME: All times indicated in these Specifications are PREVAILING TIMES. Prevailing Time is either Central Standard Time or Central Daylight Time, whichever is appropriate.
- G. WORK: All obligations undertaken by the Contractor, pursuant to the Contract Documents.
 - 1. Work includes, but is not limited to, the furnishing of all of the materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, unloading, superintendence, insurance, bonds, taxes and all other services, facilities, required demolition (major and minor as applicable) and expenses necessary for the full performance and completion of requirements of the Contract Documents.
 - 2. Work also means that which is produced, built, or constructed, pursuant to the Contract Documents.
 - 3. Work includes all labor and materials to properly install and make functional.
- H. PROVIDE: Furnish and install (including materials, accessories and labor) ready for the Owner's use. Comply with manufacturer's installation

requirements as minimum standard, Drawings and Specifications where installation requirements exceed manufacturer's recommendations.

- I. EQUAL, APPROVED EQUAL: Alternative products meeting or exceeding the base specification product or process and approved by the Architect/Engineer IN WRITING as suitable for this application. If not accepted prior to bidding, acceptance is discretionary.
 - J. SUBSTANTIALLY COMPLETE: When work progress has arrived at the point where the Owner may have full use of the installation for the purpose for which the same was installed, all components installed, equipment operating under control and minimum code compliance achieved, then, the work may be declared substantially complete if so requested by the Contractor and specifically approved by the Owner.
 - K. PUNCH LIST: Those items, components, installation inclusive of labor and materials (in place) which, in the opinion of the Architect/Engineer or the Owner do not conform to the intent of the Contract Documents and/or adequately satisfy the purpose and intent of the Owner.
 - L. DESIGNATED WORK: Wherein the documents designate that one contractor shall provide specified material and labor for another trade area contractor, the cost of the work and material shall be included in the bid of the contractor that is designated to provide the material and labor.
 - M. AND/OR: Wherein employed in the documents shall be either and both, singularly and together, as applicable to the intent of the Project Documents.
 - N. CONCEALED: Concealed building components, services, and obstacles subject to Change Orders, shall be limited to those components, services, obstacles, etc., not designated or known to exist, not typical to the type of construction observed and not available for inspection without destructive action. Opening of access panels, looking above accessible ceiling systems or inside chase walls is not considered concealed items.
- 1.2. In general, definitions of words employed in the Contract Documents shall be as defined in "Webster's New World Dictionary" the latest edition. The Architect shall be the interpreter in the case of multiple meanings. Exceptions to this shall include longstanding meanings in the construction industry but have not been so defined in Webster's Dictionary. Determination shall be in accordance with these Specifications.

END 01091

DIVISION 1 - GENERAL REQUIREMENTS
Section 01120 - Remodeling Project Procedures

1. GENERAL

1.1. REQUIREMENTS INCLUDE

A. Contractor:

1. Coordinate work of all crafts including that of subcontractors and his crafts as applicable.
2. Schedule elements of remodeling and renovation work to expedite completion.
3. Schedule noisy or hazardous work to avoid problems with the Owner's day-to-day building functions and general maintenance operations.
4. In addition to required incidental demolition specified in various sections, and that shown on Drawings, cut, move or remove existing construction to provide access or to allow remodeling and new work to proceed. Include:
 - a. Removal of temporary or permanent Electrical and Plumbing devices, circuits and piping plus the reinstallation of same as required to continue service.
 - b. Removal of unsuitable or extraneous materials and non-functioning components not marked for salvage, such as abandoned furnishings and equipment, and debris such as rotted wood, rusted metals, abandoned electrical and mechanical components, and deteriorated concrete.
 - c. Cleaning of surfaces. Remove surface finishes to install new work and finishes.
5. Shut off power to any air intake equipment and/or cover exterior louvers as encountered daily. All covers are to be removed and power restored as soon as possible following demolition and/or high fume assembly.

1.2. RELATED REQUIREMENTS

A. Specified elsewhere:

1. DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
2. DIVISION 1 - GENERAL REQUIREMENTS

1.3. SEQUENCE AND SCHEDULES: Schedule work in sequences within times specified in 01010.

1.4. ALTERATIONS, CUTTING AND PROTECTION

- A. Assign moving, removal, cutting and patching work to crafts qualified to perform the work in a manner to cause least damage to each type of work, and provide means of restoring surfaces to appearance of new work.

- B. Perform cutting and removal work to minimize removals, and in a manner to avoid damage to adjacent work.
 - 1. Cut finish surfaces such as masonry, tile, plaster or metals by methods to terminate surfaces in a straight line at a natural point of division.
- C. Perform cutting and patching in accordance with Section 01045.
- D. Protect from damage existing finishes, equipment and adjacent work which is scheduled to remain.
 - 1. Protect existing and new work from weather and temperature extremes.
 - 2. Provide weather protection, waterproofing, heat and humidity control to prevent damage to remaining existing work and to new work.

2. PRODUCTS

2.1. SALVAGED MATERIALS

- A. The Contractor shall remove salvage and waste material.

2.2. MATERIALS FOR PATCHING, EXTENDING AND MATCHING

- A. Ensure that work is complete:
 - 1. Provide same materials or types of construction as that in existing structure, to patch, extend or match existing work.
 - a. Contract Documents may not define products or standards of workmanship present in existing construction.
 - b. Consult the Drawing Details and/or consult the Architect/Engineer.
 - 2. Presence of a product, finish or type of construction requires that patching, extending or matching be performed to make work complete and consistent to identical or better quality standards.

3. EXECUTION

3.1. REMOVE EXISTING CONSTRUCTION

- A. Consult the drawings for removals and replacements as set forth.

3.2. PERFORMANCE

- A. Patch and extend existing work using skilled craftsmen capable of matching existing quality of workmanship.

- B. For patched or extended work, provide quality equal to that specified for new work.

3.3. ADJUSTMENTS

- A. Where existing construction and components are removed, patch floors, walls, doors, trim, and ceilings with finish materials to match existing as closely as possible.

3.4. DAMAGED SURFACES RESULTING FROM CONTRACTOR WORK

- A. Patch and replace all portions of the existing finished surfaces found to be damaged, lifted, discolored or showing other imperfections, with matching material.
 - 1. Provide adequate support prior to patching the finish.
 - 2. Refinish patched portions of painted or coated surfaces in a manner to produce uniform color and texture over entire surface.
 - 3. When existing surface cannot be matched, refinish entire surface to nearest intersections.

3.5. TRANSITION FROM EXISTING TO NEW WORK

- A. When new work abuts or finishes flush with existing work, make a smooth transition. Patched work shall match existing adjacent work in texture and appearance as closely as possible.
 - 1. When finished surfaces are cut in such a way that a smooth transition with new work is not possible, terminate existing surface in a neat manner along a straight line at a natural line of division, and provide trim appropriate to finished surface.
 - 2. Refinished cut surfaces must be weathertight comparable to the warranty period.

3.6. CLEANING

- A. Perform construction cleaning as specified in Section 01561.
 - 1. Clean Owner occupied areas, where work prevails, daily.
 - 2. Clean all spillage, overspray and heavy dust collections in Owner's occupied areas immediately.
- B. At completion of work of each craft, clean area and make surfaces ready for work of successive crafts.
- C. At completion of alterations work in each area, provide final cleaning and return space to a condition suitable for use of Owner.

END 01120

DIVISION 1 – GENERAL REQUIREMENTS
Section 01200 – Project Meetings

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Weekly project meetings will be set up at the Pre-Construction Meeting and may be called at any time during project construction by the Owner, the Architect/Engineer and may be called by the Contractor with approval of the Owner or Architect/Engineer.
- 1. The purpose of the project meeting will be to establish scheduling, coordination and work processes and to clarify the contract requirements. Project meetings shall be attended by the project superintendent for the Contractor and by a representative of each major subcontractor and supplier employed on the project.

END 01200

DIVISION 1 - GENERAL REQUIREMENTS
Section 01310 - Construction Schedules

1. GENERAL

1.1. DESCRIPTION

- A. Related work specified elsewhere
 - 1. 01010 - Summary of Work
 - 2. 01340 - Submittals
 - 3. 01370 - Schedule of Values
- B. Work Includes:
 - 1. Submittals of project construction schedules for work within seven (7) business days after Notice of Award.
 - 2. Revision of schedules monthly. Each Contractor shall submit schedule of operations for the Contract to the General Contractor who shall prepare a master schedule and submit to the Architect/Engineer. Said submittals shall accompany each pay request.
 - 3. Progress, schedules and problems will be discussed at the weekly meeting.
- C. Content of Schedules:
 - 1. Indicate complete sequence of construction by activity.
 - a. Shop drawings, product data and samples: In accordance with Section 01340.
 - b. Decision dates for the selection of finishes.
 - c. Product procurement date, fabrication of each element of the construction work.
 - d. Dates for beginning and completion of each element of the construction work.
 - 2. Indicate cumulative percentage of work completed as of the day of Contractor's submittal of monthly pay request.
 - 3. Furnish separate schedule, showing submittals, review items, procurement schedules and delivery dates, as required.
 - 4. Define critical portions of entire schedule.
- D. Submit initial schedules within seven (7) business days after date of Notice of Award.

2. PRODUCTS (N/A)

3. EXECUTION

3.1. ACTION

- A. Provide manpower, overtime, and equipment as needed to maintain the

schedule. The Owner will not authorize additional payment for overtime or additional manpower needed to maintain, achieve, or make up time to meet the schedule.

- B. The General Contractor shall notify the Architect and the Owner promptly of any deficiency in performance, which is unacceptably impacting the schedule or delaying progress.
- C. The Subcontractor(s) shall immediately notify the General Contractor, in the event any trade area Contractor's progress is impeding their ability to maintain the schedule.
- D. The General Contractor shall immediately provide notification of this report to the Architect and the Owner and shall include a plan of action to regain schedule.

3.2. SCHEDULE

- A. Contractors proposed schedule and timeline shall be delivered for review within seven (7) days.
 - 1. Schedule will be subject to review and negotiated revision after Owner and Architect input are considered.
 - 2. Schedule should be available for the Preconstruction meeting.
 - 3. Schedule will be discussed at weekly meeting.

3.3. MANNING THE WORK

- A. Contractors shall work overtime, Saturdays and/or double shifts if work falls one (1) week behind prepared schedule or agreed to revision and shall continue to work Saturdays and double shifts, full crews or with additional crews until lost time is recovered.

END 01310

DIVISION 1 – GENERAL REQUIREMENTS

Section 01340 - Submittals

1. GENERAL

1.1. DESCRIPTION

- A. Prior to commencing the work, the Contractor shall verify the submittal procedure to assure compliance with the submittal requirements.
- B. Required Submittals
 - 1. Shop Drawings, Submittals, and Submittal Brochures
 - a. Submit four (4) copies minimum unless notes otherwise in a particular section.
 - b. Architect and/or Owner will retain two (2) copies.
 - c. Contractor will receive remaining copies for his use.
 - d. Shop drawings and material schedules shall be accompanied by catalog cuts or fliers giving full data, description, function, and capacity of item or component thus submitted. Catalogs and fliers shall be clearly and precisely marked as to submittal content. The Architect/Engineer's office will provide no sorting to assure the submittals compliance with documents.
 - 2. Samples
 - a. When samples are requested submit two (2), minimum.
 - b. All samples will be retained unless otherwise noted in the Specifications.
 - 3. The Contractor shall, within seven (7) days of Notice of Award, submit to the Architect the following:
 - a. Name of person under Contractor employment at the job site in charge of safety.
 - b. Name of project on site Superintendent of the work.
 - c. Submit three (3) bound, indexed copies minimum.
 - d. These manuals shall include all Shop Drawings and all Submittals, all Equipment Brochures, Operating Manuals, Operating Instructions, names, addresses, and telephone numbers for guarantee work, all bound into a good quality binder or loose-leaf notebook, clearly labeled.
 - e. THE SHOP DRAWINGS RETAINED BY THE OWNER AND ARCHITECT ARE NOT AVAILABLE FOR PREPARING THESE MANUALS. If additional copies are required for this, the Contractor shall make allowance and submit additional sets.
 - 4. The Contractor, within thirty-one (31) business days of Notice of Award, submit in accord with 00040/1.17.

C. -BUILT DRAWINGS

1. The Contractor shall provide the Architect/Engineer's Office with a marked set of drawings showing changes from the original drawings. Marked As-Built Drawings shall be submitted upon progress having complied with Substantial Completion progress.

D. REVIEW OF SUBMITTALS

1. Submittals will be reviewed by the Architect and/or the Owner and will be checked for Contract compliance and the basic fabrication methods.
2. The Contractor must verify all the dimensions, field conditions, field clearances, and rough-in requirements with adaptations as necessary.
3. An omission on the shop drawings followed by a review oversight thereof by the Architect/Engineer shall not be construed as the calling of specific attention thereto.
 - a. Shop Drawings do not become "Contract Documents" after Architect review. See Section 01091 Definitions.

END 01340

1. GENERAL

1.1. DESCRIPTION

- A. Related work specified elsewhere:
 - 1. 01010 - Summary of Work
 - 2. 01310 - Construction Schedules

- B. Contractor shall provide:
 - 1. Submittals of Master Cost Breakdown to Architect/Engineer at least fifteen days prior to submitting first Application and Certificate for Payment.
 - 2. Data to substantiate Master Cost Breakdown values if requested by Architect/Engineer.
 - 3. Submittal of quantities of designated materials where applicable.
 - 4. Listing of quantities for materials specified under unit prices.
 - 5. The Master Cost Breakdown shall serve as the only basis for the applications for payment.

- C. The Master Cost Breakdown shall serve as the only basis for the applications for payment.

- D. NOTE: PAYMENT FOR MATERIALS STORED ON OR OFF SITE WILL BE LIMITED TO THOSE MATERIALS LISTED IN THE MASTER COST BREAKDOWN.
 - 1. If Contractor requests payment for materials stored off the site, such materials must be insured and the Contractor must submit a Certificate of Insurance (identifying the location of the stored material and the stated value thereof) with the pay request.
 - 2. Said certificate shall insure the Owner's investment and identify the location of stored materials.

1.2. FORMAT OF SUBMITTALS

- A. Submit typewritten Master Cost Breakdown. (Contractor may use AIA Schedule of Value Form, i.e., continuation page from AIA Application and Certificate for Payment Form G702).

- B. Use the Table of Contents in these Specifications for the order of listing costs of all work. Verify all costs of the work.

- C. Identify each line item with the same number and title listed in the Table of Contents of these Specifications.

1.3. PREPARATION

- A. Itemize separate line item cost for each of the following cost items assignable to the entire project:
 - 1. Overhead and Profit.
 - 2. Bonds.
 - 3. Insurance.
 - 4. General Conditions and Operations.
- B. Itemize separate line item cost for work required by each section of specifications. Identify work of:
 - 1. Contractor's own labor forces.
 - 2. Each Subcontractor.
 - 3. Each major Supplier of products or equipment.
- C. Break down installed cost into:
 - 1. Delivered cost of product.
 - 2. Labor cost, excluding overhead and profit.
- D. Round off figures to the nearest ten dollars.
- E. Make sum of total costs of all items listed in the Schedule of Values equal to total Contract sum.

1.4. REVIEW AND RESUBMITTAL

- A. After review by the Architect/Engineer, revise and resubmit the Master Cost Breakdown, should same be required.
- B. Resubmit revised cost breakdowns in the same manner.

1.5. UPDATE

- A. Update the Master Cost Breakdown when:
 - 1. Directed by the Architect/Engineer - monthly.
 - 2. Change of Subcontractor or Supplier occurs.
 - 3. Change of product or equipment occurs.
 - 4. List change orders by number should same become applicable to the Contract.

END 01370

1. GENERAL

1.1. DESCRIPTION

- A. Related work specified elsewhere
 - 1. All work provided under the Contract Documents shall be inspected by the Contractor for conformance with the documents prior to the Architect's inspection.
 - 2. All in place work shall be subject to inspection by the Architect/Engineer and the Owner for conformance with the requirements and standards set forth in the Contract Documents and first quality general construction standards.

1.2. WORK BY THE CONTRACTOR INCLUDES

- A. The Contractor's superintendent of the project shall inspect all work performed by the Contractor, his employees, Subcontractors and the Installing Suppliers before same is submitted to the Architect/Engineer as work performed.
 - 1. Inspect for proper installation.
 - 2. Inspect for proper materials.
 - 3. Inspect for workmanship.

1.3. WORK BY THE ARCHITECT/ENGINEER INCLUDES

- A. The Architect/Engineer shall have access to the work at all times and shall make inspection of work in place, construction components and allow or disallow in accordance with these Specifications and the accompanying Drawings.

1.4. PROCEDURES AND REPORTS

- A. The Architect/Engineer, after making inspections, may report same to Contractor separately or jointly, verbally or in writing, as related to the Contract Documents in general and related to certain requirements specifically.
- B. Notice shall be given the Contractor of unsatisfactory materials, handling, and storing of project materials, in place installation, workmanship, and documents compliance conduct on the job site property.
- C. The Contractor shall correct or replace same as applicable to the inspection report.

1.5. QUALITY ASSURANCE

A. The Architect/Engineer or appointed special inspector for certain processes:

1. Will make intermittent inspections at the job site and notify the Contractor of deficiencies as and when observed.
 - a. Notifications to the Contractor will be written (if not agreed upon and/or promptly corrected following verbal notification) wherein the deficiency shall or may become covered up by continuation of progress, wherein the deficiency does not comply with the required procedures.
2. Will be available to the Contractor upon call for inspections which may come to the attention of the Contractor at times not corresponding with intermittent inspections by the Architect/Engineer.
 - a. The Architect/Engineer will endeavor to respond to the Contractor's call with due promptness and no later than twenty-four (24) hours.
3. Will disallow payment for uncorrected work on the upcoming submittal by the Contractor for periodic progress payment.

B. The Contractor

1. Shall correct all work associated with the inspections made by the Architect/Engineer promptly or present an approved schedule for same.
2. Shall, wherein redeliveries of materials and components are involved:
 - a. Promptly respond IN WRITING to the deficiency notice.
 - b. Issue a schedule of correction, if applicable.
 - c. Make right damages effected to work of other contractors involved, as applicable.
3. Shall notify the Architect/Engineer of the schedule for the following day by day operations at the job site:
4. Contractor shall notify Architect/Engineer twenty-four (24) hours in advance of commencement of operations.

1.6. OWNER

A. Owner inspections will be made by the Unit 5 District Executive Director of Operations, Joe Adelman, phone 309/557-4101.

END 01420

DIVISION 1 – GENERAL REQUIREMENTS
Section 01510 – Temporary Utilities

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Contractor shall provide and maintain specified temporary utilities.
- B. Contractor may extend services from Owner's existing sources.
 - 1. Tap on and extension of services shall be implemented and paid for by the Contractor requiring utility.
- C. Contractor shall furnish (included in his Base Bid):
 - 1. The cost of all utilities required by him which:
 - a. Are in excess of existing available at the building and are necessary for the completion of his work.
 - b. Exceed the capacity of existing or permanent systems and are necessary for the completion of his work.
 - 2. Hoses and fittings from temporary standpipes or water service connection to his work.
 - 3. Drinking water for his own forces.
 - 4. Extension cords, extension lights and lamps from approved temporary power centers to his work.
 - 5. Ventilation for his storage spaces containing volatile or hazardous materials.
 - 6. Security for materials and equipment.
 - 7. Temporary toilet facilities.

1.2. RELATED REQUIREMENTS

- A. Furnished by Owner
 - 1. Authorization of existing facilities for temporary use.
 - a. Electrical power service.
 - b. Lighting extended by drop cords from existing sources.
 - c. Water service extended from existing outlets by the Contractor.
 - 2. Owner will pay all costs of consumables used for construction purposes for utilities it furnishes.
 - 3. The Contractor requiring Owner-furnished services shall provide and pay for extension or modification of services to perform the work and for restoration of services and Owner equipment at completion of the work.

1.3. DESCRIPTION OF UTILITY SYSTEMS

A. Electrical system:

1. Power is supplied to the site by Ameren Illinois.
2. The Contractor is advised to contact Ameren Illinois to get temporary protection at electrical service entrance (over and adjacent to) the construction area. Phone 800/755-5000, as printed in the area phone book, further contact number may be provided by Owner.
3. The Contractor shall provide and maintain extensions of existing electric power system for construction needs throughout construction period.

B. Natural Gas

1. Provided by Nicor Gas Company, phone 888-642-6748
 - a. Building distribution lines exist as well as branch lines to equipment. Verify all shut-off locations prior to work.

C. Water Service:

1. Water provided by the Town of Normal.
2. For construction purposes: The Contractor shall provide and maintain temporary water service connection throughout construction period. Continually running water during construction operations is not allowed.
 - a. For temporary fire control.
 - b. For material preparation and mixing.
 - c. For cleaning operation.
3. The Contractor provides drinking water for his own employees.

1.4. REQUIREMENTS OR REGULATORY AGENCIES

- A. Compliance with specified codes and regulations (latest editions in effect as of the date of bidding documents) is the responsibility of the Contractor. See 01060.

1.5. USE OF OWNER'S EXISTING SYSTEMS - RULES AND REGULATIONS

- A. Owner's mechanical systems shall remain in service throughout the construction except for prearranged temporary shutdowns.
- B. Make all arrangements with the Owner's Representative for use of electrical power for hand tools, temporary lighting, toilets and use of water. Temporary connections shall not interfere with or starve the ordinary use of the building or for ongoing maintenance and service activities therein.

C. Limitations

1. Keep work areas enclosed to avoid energy waste.
2. Keep away from any areas as directed by Owner/Representative.

D. Modify temporary utility systems if requested by the Architect/ Engineer or the Owner.

E. Upon completion of work, or when directed by Architect/Engineer, restore existing systems to original condition or specified conditions.

END 01510

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall provide and maintain construction aids and equipment for personnel use and to facilitate execution of the reroofing work.
 - 1. Chutes
 - 2. Cranes
 - 3. Hoists
 - 4. Platforms
 - 5. Railings
 - 6. Ramps
 - 7. Runways
 - 8. Stairs
 - 9. Temporary enclosures
 - 10. Telescopic conveyances
 - 11. Ladders
 - 12. Scaffolds
 - 13. MSDS - Material Safety Data Sheets
 - 14. EMS - Emergency Medical Supplies
 - 15. Fire extinguishers and/or hoses
 - 16. Barricades, construction barriers
 - 17. Safety equipment
 - 18. The Contractor and/or each subcontractor shall furnish all construction aids for his own workmen and shall be totally responsible for the safety of same.

- B. The Contractor is responsible for the safe use of all construction aids during the construction period. This includes the safe storage of construction aids when workers are not on site.

- C. Remove all construction aids on completion of the work, or as directed.

1.2. RELATED REQUIREMENTS

- A. Specified elsewhere
 - 1. 01010 - Project Summary
 - 2. 01045 - Cutting & Patching
 - 3. 01120 - Remodeling Project Procedures
 - 4. 01530 - Barriers
 - 5. 02072 - Minor Demolition for Remodeling

2. PRODUCTS

- 2.1. MATERIALS. Materials may be new or used, suitable for purpose. Comply with specified codes and standards. The Contractor shall bear total responsibility for the safety compliance of all materials and components.

2.2. CONSTRUCTION AIDS

- A. Vertical on site transportation of construction materials, equipment and tools shall be provided by the Contractor requiring same and shall be separate of interior and building stair systems.
- B. Maintain construction aid facilities components and equipment in a first class condition.
 - 1. Protect against damage.
 - 2. Repair or replace damaged components to original condition, as becomes necessary as a result of construction operations.
 - 3. Do not overload existing construction with construction aids equipment.

2.3. TEMPORARY ENCLOSURES

- A. Provide temporary weathertight enclosure at openings made in the building to facilitate work processes. Provide weather protection for materials and to prevent entry of unauthorized persons.
- B. Provide temporary enclosures or control, as applicable, to separate work areas from existing areas occupied by the Owner; to prevent penetration of dust, fumes or moisture into occupied areas, to prevent damage to existing Owner equipment and to protect Owner's employees and operations from construction work.
- C. Close joints between temporary closures materials and seal the edges and intersections to existing surfaces to prevent penetration of dust, fumes, elements of weather, or moisture.

3. EXECUTION

3.1. PREPARATION. Consult with the Architect/Engineer, review site conditions and factors that affect construction procedures and construction aids, including adjacent properties and public facilities which may be affected by and during execution of the work.

3.2. INSTALLATION

- A. Relocate construction aids as construction progresses to expedite storage, convenience work activities of others and to accommodate legitimate requirements of Owner and the Owner's maintenance personnel at the site.

3.3. REMOVAL

- A. Completely remove temporary construction aids:
 - 1. When job is not staffed by Contractor personnel.
 - 2. At project completion.
- B. Clean and repair damage caused by installation or use of temporary facilities.

END 01525

DIVISION 1 – GENERAL REQUIREMENTS

Section 01530 - Barriers

1. GENERAL

1.1. WORK INCLUDES

A. The Contractor shall

1. Provide and maintain suitable plastic barrier fence to keep unauthorized personnel away from equipment and devices and protect the work, stored materials, existing facilities and utilities, trees and plants from construction operations.
2. Provide and maintain protection from any falling objects or material at any and all building exits where work is proceeding on the roof above.
3. Contractor responsible for OSHA safety requirements.

1.2. RELATED REQUIREMENTS

A. Specified elsewhere

1. 01010 - Project Summary
2. 01525 - Construction Aids

2. PRODUCTS

2.1. MATERIALS

- A. Materials may be new or used, suitable for purpose.

3. EXECUTION

3.1. INSTALLATION

- A. Install to a neat and uniform appearance, structurally adequate for purposes.
- B. Maintain barriers during entire construction period.
- C. Relocate barriers as construction progresses.

4.

4.1. TREE AND PLANT PROTECTION

- A. Preserve and protect existing trees and plants at site and those adjacent to site.
- B. Replace or repair, trees and plants which are damaged or destroyed due to construction operations.

4.2. REMOVAL

- A. Completely remove barriers when construction has progressed to the point that they are no longer needed, and when approved by the Architect/Engineer.
- B. Clean and repair damage caused by installation, fill and grade site areas to indicated elevations and slopes, and clean the area.

END 01530

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall
 - 1. Protect work, stored materials and construction equipment from theft and vandalism.
 - 2. Protect premises and project at ground level for 01525 equipment and devices from entry by unauthorized persons.
 - 3. Cooperate with the Owner's maintenance personnel and protect the Owner's operations at the job site from theft, vandalism or damage from entry by unauthorized persons.
 - 4. Make the Superintendent the Contractor's safety manager for the project unless the Contractor makes a specific assignment in writing otherwise.
- B. The Contractor shall be responsible for the security of his materials and tools. The Contractor shall exercise reasonable security precautions at all times that the project is left unattended.
- C. The Contractors shall cooperate in maintaining the construction security by closing and locking all openings whenever the work is not manned and at the close of each day's work.

1.2. RELATED REQUIREMENTS

- A. Specified elsewhere
 - 1. 01010 - Project Summary

1.3. MAINTENANCE OF SECURITY

- A. Initiate security program in compliance with Owner's system prior to mobilization.
- B. Maintain security program throughout construction period until substantial completion.
- C. Cooperate with the Owner to maintain security.
- D. Comply with Owner regulations for safety and security.

END 01540

DIVISION 1 – GENERAL REQUIREMENTS
Section 01550 – Access Roads & Parking Areas

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Contractor follow Drawing Sheet C-1 clearly labeled 'Staging' on Drawing Sheets.
 - 1. Maintain equipment and materials vehicular delivery access to buildings in the project for the Owner's normal use of the facility.
 - 2. **DO NOT BLOCK BUILDING EXITS AND ALL EMPLOYEE PARKING IS ALLOWED ONLY IN PAVED PARKING LOTS OR ON STREET. DO NOT BLOCK ACCESS TO DUMPSTERS.**
 - 3. No parking or stored material allowed over existing manhole covers and on grass covered ground. Contractors are to provide fencing around all manholes.
 - 4. Staging area and roofing company employee parking will be discussed at Pre Bid Meeting.

1.2. RELATED REQUIREMENTS

- A. Specified elsewhere
 - 1. 01010 - Project Summary

1.3. ON SITE ROADS AND PARKING AREAS – SEE DRAWING C-1.

- A. Contractor shall utilize existing roads, drives, walks and to provide access to construction work, storage and other areas required for execution of the Contract.
 - 1. Location: The Contractor shall consult with the Owner's building administrator and comply with all regulations and limitations imposed thereby.
 - 2. The Contractor arranges for parking facilities: Adequate to provide for employees and subcontractor employees.
 - 3. The Contractor shall make his own arrangements concerning street traffic interference and barricade requirements.
- B. Provide access for emergency vehicles.
- C. Maintain driveways a minimum of fifteen feet (15') wide between and around combustible materials in unloading and mobilization areas.
- D. Keep fire hydrants and water control valves free from obstruction and accessible for use.

1.4. EXISTING CONDITIONS

- A. City improvements

1. Obtain city permission to operate equipment of excessive width or weight on public right-of-way.
 2. Do not overload parking lot with equipment or material storage which might damage the surface.
- B. Owner site improvements include paved parking areas, concrete sidewalk landscaping and play equipment.
1. Discuss with Owner planned equipment and material delivery routes to minimize damage.

2. PRODUCTS (Not Applicable)

3. EXECUTION

3.1. MAINTENANCE

- A. Maintain roads, walks and parking areas (where use of same has been allowed by the Owner) in a sound, safe and clean condition.
- B. Repair or replace all surfaces damaged during construction work progress.
1. Contractor repair pavements, landscaping, or lawn areas damaged during construction.
 2. Contractor document any damage to pavement, landscaping or lawns that exist prior to construction operations.
 - a. This may be accomplished by photographs or in conference at the site with A/E and Owner.

END 01550

DIVISION 1 – GENERAL REQUIREMENTS
Section 01561 – Construction Cleaning

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall provide cleaning and disposal of waste materials, debris and rubbish daily. **DO NOT STOCKPILE DEBRIS ON ROOF OR GROUND BEYOND END OF WORK DAY.**

1.2. RELATED REQUIREMENTS

- A. Specified elsewhere:
1. 01010 - Project Summary
 2. Individual Specification Sections: Specific cleaning for particular product or type of work.

2. PRODUCTS

2.1. EQUIPMENT

- A. The Contractor shall provide covered containers for deposit of waste materials, debris and rubbish.
- B. Use of Owner's refuse disposal containers shall not be allowed.

3. EXECUTION

3.1. CLEANING BY CONTRACTOR

- A. Maintain areas under Contractor's control free of waste materials, debris and rubbish.
- B. Remove debris and rubbish from the site.
- C. Control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.
- D. Repair / clean / replace interior building surfaces and equipment that may be damaged as a result of exterior envelope failure.

- 3.2. DISPOSAL. Remove waste materials, debris and rubbish from the site daily and dispose of same off site.

END 01561

DIVISION 1 – GENERAL REQUIREMENTS
Section 01568 – Hazardous Materials

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall take all necessary precautions in the handling of construction materials to protect persons and property from injury due to use of currently known hazardous materials.
- B. This requirement applies only to currently EPA identified materials in identified types of users. This does not apply to currently or commonly employed materials not now listed to be hazardous in their intended use.
- C. The Contractor shall order all materials and fabrications to be free of listed substances and to be in compliance with EPA applicable regulations for use in this state. If specified products or components are not available substance free, then the Architect and Owner shall be notified of the condition so that alternative material can be selected or the material can be appropriately documented for monitoring by the Owner if no substitute is available.

1.2. LISTED SUBSTANCES

- A. All new materials and components shall be certified free of:
 - 1. Asbestos
 - 2. PCB
 - 3. Releasable formaldehyde
 - 4. Erodible lead in drinking water piping and equipment or surfaces exposed to normal traffic or air movement.

END 01568

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor and Subcontractor must provide and maintain:
 - 1. Storage for materials and equipment to be installed applicable to the project.
 - 2. Protection and security for stored materials and equipment, on and off site.
- B. Related work specified elsewhere:
 - 1. 01010 - Project Summary

1.2. OFF SITE AUTHORIZATION

- A. Off site storage of materials for which payment is sought will be permitted only on the Owner's authorization in accordance with the General Conditions and Supplementary General Conditions.
- B. Off site storage of materials for which payment is requested shall be identified as to product, value, etc. and shall be certified insured to protect the Owner's investment therein.
 - 1. Provide Insurance Certificate in favor of the Owner.
 - 2. Submit above Insurance along with request for payment for materials stored off site.

2. PRODUCTS

2.1. PROTECTIVE MATERIALS

- A. For the duration of the storage period, provide materials that will provide proper protection against the elements or other harmful environmental conditions.
 - 1. **If open cell insulation or fibrous insulation gets wet before installation – discard. If closed cell insulation gets wet before installation make sure it is dry before installing.**

3. EXECUTION

3.1. LOCATION

- A. The on site storage location shall be where authorized by the Owner within the site construction limits.

- B. Do not overload existing or new structures or portions thereof.
 - 1. Do not stack loads in a concentrated area of a structure.

3.2. INSTALLATION

- A. Provide all temporary storage facilities, as necessary, for the protection of stored materials, equipment, etc. which are subject to environmental damage.

3.3. LIMITATIONS

- A. Do not exceed the capacity of any structure.
- B. Do not inhibit use of fire exits, fire lanes, parking, owner operations.
- C. Store combustible materials in accordance with applicable regulations.
- D. Do not disrupt any utility that may render any alarm inoperable.

- 3.4. REMOVAL. Remove all temporary storage facilities, equipment, contents and utilities at completion of the construction activities or as directed by the Architect/Engineer.

END 01620

DIVISION 1 – GENERAL REQUIREMENTS
Section 01630 – Substitutions & Product Options

1. GENERAL

1.1. DESCRIPTION

- A. Related requirements specified elsewhere
 - 1. 00040 - Instructions for Bidders
 - 2. 00300 - Proposal Form
 - 3. 00307 – Product Substitution Form
 - 4. 01340 - Submittals
 - 5. 01370 - Schedule of Values

1.2. SPECIFIED PRODUCTS

- A. All bids shall be based on providing products exactly as specified or equal as prior approved.
- B. Products specified only by reference or performance standards, shall be met or exceeded by the standards of any manufacturer's material and subject to the Architect/Engineer's approval.
- C. Products specified by naming several products or manufacturers shall be selected from any product and manufacturer named.
- D. See Section 01340/1.1.C.2.a. & b.

1.3. SUBSTITUTIONS, BIDDER/CONTRACTOR OPTIONS

- A. PRIOR TO BID OPENING - The Architect/Engineer will consider requests to amend the bidding documents to add products not specified, provided such requests are received in adequate time prior to bid opening date.
 - 1. Requests received after ten (10) days before bid due date will not be considered.
 - 2. If a request is approved, the Architect/Engineer will endeavor to issue an appropriate addendum not less than seven (7) calendar days prior to bid opening date.
 - 3. Ten (10) days is based on the start bid date, and will not be extended by bid extension unless same is extended more than ten (10) days.
- B. WITH BID - Substitutions will not be considered with the bids by inclusion of Form 00307 with the Bid. The Owner and Architect will evaluate these substitutions based on cost, quality, compatibility, schedule, etc.
- C. AFTER AWARD OF CONTRACT - No substitutions will be considered after Notice of Award, except under one or more of the following conditions:

1. Substitution is required for compliance with final interpretations of code requirements or insurance regulations.
2. Unavailability of specified products, through no fault of the Contractor.
3. Subsequent information discloses inability of specified product to perform properly or to fit in designated space.
4. Manufacturer/fabricator refusal to certify or guarantee performance of specified product as required. This does not alter the requirement.
5. When a substitution would be substantially to the Owner's best interest.

1.4. SUBSTITUTION REQUIREMENTS

- A. Submit four (4) copies of each request for substitution. Include in each request for substitution:
1. Complete data substantiating compliance of proposed substitution with Contract Documents.
 2. For products:
 - a. Product identification, including Manufacturer's name and address.
 - b. Manufacturer's literature.
 - 1) Product description.
 - 2) Performance and test data.
 - 3) Reference standards.
 - c. Samples, if applicable.
 - d. Name and address of similar projects on which product was used and date of installation.
 3. For construction methods substitution:
 - a. Detailed description of proposed methods.
 4. Itemized comparison of proposed substitution with product or method specified, including accurate and true cost data on proposed substitution in comparison with product or methods specified.
 5. Data relating to changes in construction schedule.
 6. Identify:
 - a. List other contracts affected, if applicable.
 - b. List changes or coordination required.
- B. In making requests for substitution, bidder/contractor represents:
1. He has personally investigated proposed product or method and determined that it is equal or superior in all respects to that

- specified.
2. He will provide the same guarantee for substitutions as for product or method specified.
 3. He will coordinate installation of accepted substitutions into work, making all such changes as may be required for work to be complete in all respects.
 4. He will provide complete cost data including all related costs under his contract (and other Prime Contract's, as applicable) whose work may also be affected by the substitution in product or method.
 5. He will assume full responsibility for all additional costs and expenses to the Owner, Architect/Engineer (and other contractors employed on the same project, as applicable).
 6. The Contractor agrees that it is the Contractor's sole responsibility to stand any costs that may be attributable to an allowed substitution that may surface as construction proceeds toward finalization.

C. Substitution will not be considered if:

1. It is indicated or implied on shop drawings or product data submittals without formal request submitted in accordance with Paragraph 1.4 above.
2. Acceptance will require substantial revision of Contract Documents.

END 01630

DIVISION 1 - GENERAL REQUIREMENTS
Section 01700 - Project Closeout

1. GENERAL

1.1. WORK INCLUDES

- A. Project Closeout procedures cannot be initiated until the steps on the following checklist have been taken:

FINAL APPLICATION FOR PAYMENT CHECKLIST

- ___ 1. Letter to A/E that deficiency work is complete
- ___ 2. Final Lien Waiver from the Contractor (2 copies)
- ___ 3. Final Lien Waivers from Subcontractor/Suppliers (2 copies)
- ___ 4. Final Affidavit showing \$0.00 due to Subcontractors and \$0.00 due to Suppliers (2 copies)
- ___ 5. Bonding Company Final Payment Approval Letter (2 copies)
- ___ 6. Certification of all guarantees beyond standard 1-year (2 copies)
- ___ 7. Contractor's Periodic Remaining for partial payments (2 copies)
- ___ 8. Additional warranty certifications as may be requested (2 copies)
- ___ 9. Operating manuals and instructions, neatly bound (3 copies)
- ___ 10. Manufacturer's Product Warranty Certification
- ___ 11. Care and Maintenance Instructions
- ___ 12. All employee wage reports not previously submitted.

- B. All the above documents submitted must bear live signatures.
- C. Signatures on all documents submitted shall be by an official within the company's legal organization designated to represent the company in legal transactions.
- D. The Contractor's signature shall be the same signature as appears on the Owner/Contractor Agreement. See 00300 - Proposal & Agreement.

END 01700

DIVISION 1 - GENERAL REQUIREMENTS
Section 01740 - Guarantees, Warranties & Bonds

1. GENERAL

1.1. WORK INCLUDES

- A. Provide all guarantees, warranties and bonds, as specified.
- B. Related work specified elsewhere
 - 1. All work.
- C. Submittals: The Contractor shall process, acquire and submit the Guarantees, Warranties and Bonds as specified below:
 - 1. Bid Bond.
 - 2. Labor & Material Payment and Performance Bonds, following award.
 - 3. Guarantees: Submit on Contractor's letterhead a one-year material and labor guarantee for all work except for special warranties.
 - 4. Contractor shall submit a letter of certification on Contractor's letterhead that no products containing ACM or PCB's were used in the completed work.

1.2. WARRANTY

- A. The Contractor warrants that all work provided under the Contract will be in conformance with the Contract and free from defects in workmanship, materials and equipment for a period of one (1) year or such longer period as may be specified in the Contract documents. Warranty time periods shall commence with the date of Owner acceptance of the Certificate of Substantial Completion or the whole or any part of the project. The warranty time period for any incomplete or uncorrected work at the time of Substantial Completion shall commence with the date of Final Completion.
- B. The Contractor warrants that all workmanship, materials and equipment for those building systems subject to seasonal loads will be in conformance with the Contract and free from defects for a period of two (2) years, commencing with the date of Owner acceptance of the Certificate of Substantial Completion. This includes, but is not limited to, Heating, Ventilation, Air Conditioning, Temperature Control and Test and Balance work as specified in the Project Specifications.
- C. The Manufacturer shall, on demand made by the Owner, at any time within the thirty (30) year period following Substantial Completion, promptly repair or replace all defective or non-performing material. The Owner or the Architect/Engineer will give timely notice of such defects.
- D. Upon notice from the Owner or the Architect/Engineer of such defects or nonconformity, the Contractor shall promptly visit the site in the company.

of the Owner's representative to determine the extent of all defects on non-conformance and shall promptly repair or replace the defective or nonconforming work, including all adjacent work not necessarily provided by the Contractor, but damaged as a result of such defect or nonconformity or as a result of remedying them. If the Contractor does not promptly repair or replace a defective or nonconforming work the Owner may repair or replace such work and charge the cost thereof to the Contractor. Work which is repaired or replaced by the Contractor shall be inspected and accepted in accord with the original standards of the Contract. The warranties set forth herein are in addition to all warranties or guarantees expressed or implied by operation of law, statute or ordinance.

E. The Contractor shall deliver all commercial warranties received from the manufacturer to the Architect/Engineer prior to Final Completion, but this shall not reduce the Contractor's obligations under this Article.

F. Special Warranties

07530 - EPDM Elastomeric Membrane Roofing – Total System

Contractor's Warranty - One (1) year

Manufacturer's Warranty – Thirty (30) years & 72 mph wind speed

07600 - Sheet Metal Flashing & Trim

Contractor's Warranty – two (2) years

Manufacturer's Warranty – Twenty (20) year "Kynar 500, Twenty (20) year metal finish

07900 - Sealants & Caulks

Contractor's Warranty – One (1) year, all applications

Manufacturers' Warranty – per Section 07900 (varies for different products). Maximum printed product warranty

END 01740

1. GENERAL

1.1. REQUIREMENTS INCLUDE

A. The Contractor shall:

1. Remove roof system to existing insulation or to existing deck (see Drawings). Install new roof system as specified.
2. Remove existing counter flashing, edge trim and copings. Inspect insulation for defects and notify Architect if same exists.
3. There is no known ACM on this building.
4. Remove the north half of mechanical screen over SE area of roof.
5. Remove fourteen (14) 2 ½" diameter steel mechanical support member and one (1) 54" x 54" mechanical curb and cap.

1.2. RELATED WORK

A. Specified elsewhere:

1. 01010 - Project Summary
2. 01525 – Construction Aids
3. 07530 - EPDM Elastomeric Membrane Roofing

1.3. SUBMITTALS. Submit demolition and removal procedures and schedule in accord with 01310 and 01340.

1.4. EXISTING CONDITIONS

- A. Conduct all demolition work in such a manner to minimize interference with Owner operations and inconvenience with adjacent building areas regarding Owner, pedestrian and vehicular traffic. Maintain protected access and egress at all times.
- B. The deck is metal pan with varying elevation to provide drainage. Most roof areas of this project have poured cementitious insulation called Zonolite on the metal deck.
- C. Provide, erect, and maintain temporary barriers and security devices in accord with 01530.

2. PRODUCTS

2.1. MATERIALS

- A. See Specification Section 01525 - Construction Aids.
- B. Products and materials for minor demolition work are limited to removal, repair and replacement of existing work damaged by demolition operations.
- C. All work damage shall be repaired or replaced with new materials of the

same quality as the existing materials and installation when they were new.

- D. The existing ballast material shall be removed from the site by this Contractor. See 3.2.D below.

3. EXECUTION

3.1. PREPARATION

- A. Protect existing items not indicated to be demolished.

3.2. PERFORMANCE OF THE WORK

- A. Demolish and remove in an orderly and careful manner. Protect existing supporting structural members, existing roofs not in this Contract, traffic areas and project access.
- B. Immediately remove demolished and waste materials from site.
- C. Remove materials to be reinstalled or retained in manner to prevent damage.
- D. Store, deliver, relocate and protect in accord with Sections 01120 and 01620. See this Section, Paragraph 2.1 "PRODUCTS".
 - 1. Dump roof ballast rock at Kern St. Transportation Building, 902 Kern St., Normal, IL.
- E. Remove and promptly dispose of contaminate, vermin infested, rotted or dangerous materials encountered.
- F. Do not burn or bury materials on site.
- G. Remove demolished materials from site daily, as work progresses. Upon completion of work, leave areas in clean condition.
- H. Do not remove materials by open gravity drop. All roof materials disposed of shall be handled to prevent dust, by any means the Contractor chooses. (No dust migration, around, across, or through any part of the building, and/or on site. Change methods or cease work when advised the dust migration is unacceptable.

END 02072

1. GENERAL

1.1. BASE BID WORK INCLUDES

- A. Roof deck for removed 54" x 54' vent on SE Roof Area G.

1.2. RELATED WORK

- A. 02072 Minor Demolition for Remodeling.

2. PRODUCTS

2.1. MATERIALS - ROOF

A. Metal Decking - Roof

- 1. 20 gauge galvanized decking, Type B
- 2. Mechanical anchors as needed for I-90 to supporting structural system. 12-6-12 attachment pattern, 6-6-6 along edges.
- 3. Existing joints run through vent opening; east/west.

B. Reinforcing Flat Metal

- 1. 16 gauge galvanized

3. EXECUTION

3.1. INSTALLATION

- A. Areas subject to reinforcement are to be laid out in conference on site with the A/E representative.

- 1. Call Architect if questionable previously repaired deck openings are uncovered in Roof Area E.

B. Provide anchorage to structure.

- 1. Anchorage is directly to main structurals. 12-6-12 field, 6-6-6 ends.
- 2. Anchorage to be mechanical, power driven deck anchors (such as Hilti ENPH2 Series) with washers less than 20-gauge deck.
- 3. Pull over / pull off rating shall be 400 lbs. per anchor.

C. Provide flat stock strip metal sixteen inches (16") wide.

- 1. If required to match new metal deck to existing deck.
- 2. Where deck requires cutting top of deck to fit or bend to slope change.
- 3. Any odd closures that become necessary such as over cut openings, wall closures, etc.

4. Fasten at each high rib of intersecting deck or 6" o. c. at parallel ribs.
- D. Seal below flutes to walls as needed for sound or infiltration protection.
1. Mineral wool stuffed for sound.
 2. Fire seal at firewalls (determined by rated openings into space).
 3. At all walls extended to deck above.

END 05300

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid

1. Contractors shall provide incidental metal work required and shown on the Drawings.
2. Roofing Contractor shall:
 - a. Provide and install 1 (one) new hot-dipped galvanized exterior roof ladder, Detail 1/R-2

1.2. REFERENCES

- A. ASTM A36-77a - Structural Steel
- B. ASTM A53-80 - Hot-Dipped, Zinc-coated, Welded and Seamless Steel Pipe
- C. ASTM A307-80 - Low-Carbon Steel Externally and Internally Threaded Fasteners
- D. ASTM A325-80a - High Strength Bolts for Structural Steel Joints
- E. ASTM A386-78 - Zinc-Coating (Hot-Dip) on Assembled Steel Products
- F. ASTM A123-A - 2 oz. Hot Dipped Galvanizing
- G. AWS D1.1 - Structural Welding Code

2. PRODUCTS

2.1. MATERIALS

- A. Steel Sections: ASTM A36-77a.
- B. Steel Tubing: ASTM A53, Grade B.
- C. Bolts, Nuts, and Washers: ASTM A36-77a minimum.
- D. Welding Materials: AWS D1.1; use correct type for materials being welded.

2.2. FABRICATION

- A. Verify dimensions on site prior to shop fabrication.
- B. Fabricate items with joints tightly fitted and secured.

- C. Fit and shop assemble as one unit for delivery to site.
- D. Grind exposed welds flush and smooth with adjacent finished surface finished surface. Ease exposed edges to a 1/8" uniform radius.
- E. Supply all components for anchorage of metal fabrications. Fabricate anchorage and related components of same material and finish as metal fabrication, except where specifically noted otherwise.
- F. Hot dip galvanized metal fabrication where indicated on the Drawings.
 - 1. Exterior roof access ladder – Detail 1/R-2.

3. EXECUTION

3.1. INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
 - 1. In case of interior ladders – parallel to wall and free of burrs. Counter-sink type anchor heads of sleeve anchors.
- B. Perform field welding in accordance with AWS D1.1.

3.2. LADDERS (EXTERIOR)

- A. Provide miscellaneous assemblies shown on the Drawings, with anchors and accessories required, including but not limited to:
 - 1. Exterior roof ladder, hot dip galvanized, installed with 1/2" diameter stainless steel anchor bolts, washers and lock-nuts.
 - 2. Anchor with stainless steel expansion anchors into existing brick.

END 05500

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall provide rough carpentry (white wood) as shown on the Drawings and specified herein, including but not necessarily limited to:
 - 1. Treated lumber may be required in some locations; see Drawings. Use treated 4 X 4 for pipe / conduit supports. Framing, blocking, furring and cant extensions shall be structural grade 2x.
 - 2. Wood shims are **NOT** permitted. All blocking is to be continuous and longest dimensional length-width-thickness to meet conditions.

- B. Roof Area F & G
 - 1. Add approximately 2" new roof edge blocking.

- C. Replace any broken or rotted existing blocking.

1.1. RELATED WORK

- A. Specified elsewhere
 - 1. 01010 - Project Summary
 - 2. 01055 - Anchorage & Fastenings

1.2. PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Immediately upon delivery to site, place materials in area protected from weather.

- B. Store materials a minimum of 6 in. (150 mm) above ground on framework or blocking and cover with protective waterproof covering, providing adequate air circulation or ventilation.

- C. Seasoned materials shall not be stored in wet or damp areas.

2. PRODUCTS

2.1. MATERIALS

- A. Lumber
 - 1. Dimensions
 - a. Specified lumber dimensions are nominal: verify actual dimension required to accomplish the details shown.
 - b. Actual dimensions conform to industry standards

established by the American Lumber Standards Committee and the rule writing agencies.

2. Moisture content: nineteen percent (19%) maximum at time of permanent close in of building or structure, for lumber 2" or less nominal thickness.
 3. Surfacing: surface four sides (S4S), unless otherwise shown, or specified.
 4. Framing lumber: 2 in. (51 mm) to 4 in. (102 mm) thick, 2 in. (51 mm) to 4 in. (102 mm) wide, any commercial softwood species, unless otherwise shown or specified.
 5. Light Framing - Plates, Blocking, Bracing & Nailers: Standard and better grade.
 6. Boards: 1 in. (25 mm) to 2 in. (51 mm) thick; any commercial softwood species, unless otherwise shown or specified. Furring and grounds shall be minimum No. 1 Common Grade.
 7. Blocking for pipe supports to be ACQ treated.
- B. Plywood: CDX exposure rated and clearly stamped on material, thicknesses and listed on Drawings. No sheathing less than 5/8" shall be permitted.
1. 7-ply minimum.
- C. Rough Hardware:
1. Bolts: FS FF-B-575C
 2. Nuts: FS FF-N-836C
 3. Expansion Shields: FS FF-B-561C (limited use, see Drawings)
 4. Lag Screws and Bolts: FS FF-B-561C
 5. Toggle Bolts: FS FF-B-588C
 6. Wood Screws: FS FF-S-111C
 7. Nails and Staples: FS FF-N-105B
 8. FABCO/H-3, or equal, Stainless Steel Top Seal Fasteners
 9. Top Seals/H-3 Stainless Steel, Carbon Steel and Cadmium plated as applicable with Weath-R-Seal washers
 10. Tuff Tites #305 Stainless Steel and Cadmium plated as applicable.
 11. Top Seal/H-3 stainless steel, cadmium plated and carbon steel (as applicable) structural screws.
 12. RED HEAD stud anchors
 13. 3/8" heavy-duty tapcons with hex head.
 14. Rawl – double

2.2. QUALITY ASSURANCE

A. Grading Rules:

1. Lumber grading rules and wood species shall conform with Voluntary Product Standard PS 20-75.
2. Grading rules of the following associations shall also apply to materials produced under their supervision:

- a. Northeastern Lumber Manufacturer's Association, Inc. (NELMA).
 - b. Southern Pine Inspection Bureau (SPIB).
 - c. West Coast Lumber Inspection Bureau (WCLIB).
 - d. Western Wood Products Association (WWPA).
 - e. Redwood Inspection Service (RIS).
3. Plywood shall conform to the following:
- a. Softwood Plywood - Construction and Industrial: Product Standard PS 1-74.
 - b. Hardwood Plywood: Product Standard PS 51-71.
- B. Identify all lumber and plywood by official grade marks.
1. Lumber: Grade stamp to contain symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which graded, where applicable, and condition of seasoning at time of manufacture.
 - a. S-GRN: Unseasoned.
 - b. S-Dry: Maximum nineteen percent (19%) moisture content.
 - c. MC-15 or KD: Maximum fifteen percent (15%) moisture content.
 - d. Dense.
 2. Softwood Plywood: Appropriate grade trademark of American Plywood Association.
 - a. Type, grade, class and identification index.
 - b. Inspection and testing agency mark.
- C. Requirements of Regulatory Agencies:
1. Preservative Treated Lumber and Plywood: American Wood Preservers Bureau, Quality Mark.

3. EXECUTION

3.1. PREPARATION

- A. Examine all surfaces to receive the parts of the work specified and verify that no rot exists on any surface.
- B. Verify all dimensions of in place and subsequent construction.
- C. Application or installation of materials constitutes acceptance of existing conditions.
- D. See Drawing Details.

3.2. INSTALLATION

- A. Frame wood members to be close fit, set accurately to required lines and levels and secured rigidly in place in accordance with the Drawings.
 - 1. See 01055 for anchorage.
- B. Cut and fit framing, blocking etc. to accommodate the other work.
- C. Interlock curbing corners.
- D. Framing (white wood):
 - 1. Provide dimensioned wood for all framing, blocking, furring, nailing strips built into, or adjacent to, exterior masonry walls, wood in contact with concrete and wood in conjunction with roofing.
 - 2. Existing perimeter blocking is to remain in the final assembly. Should same, or segments of same, be discovered to have deteriorated, then said segments shall be replaced of material specified under 2.2. above and properly secured in place by the Contractor as a part of the Base Bid.
 - 3. Demolition of existing assemblies is listed in Drawings per specific locations. Provide framing to accomplish reroofing around removed vent structure in Roof Area C.

END 06100

DIVISION 07 – THERMAL & MOISTURE PROTECTION
Section 07190 – Water Repellent Coatings

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid

1. Contractor shall provide repellent coatings for exterior masonry wall surfaces on East, North and West walls of Gymnasium.
2. Provide repair of masonry wall so that a 10-year warranty could be provided to the Owner; however, a written 10-year warranty will not be required. Contractor to include in Base Bid: repair of 50 sq. ft. of wall mortar joints. There are no wall control joints on this building.

1.2. RELATED WORK

A. Specified elsewhere:

1. 01010 - Project Summary
2. 07900 - Sealants & Caulks

1.3. QUALITY ASSURANCE.

- A. Qualifications of Installers: Employ only experienced craftsmen, skilled in the installation of the specified products.

1.4. REFERENCES

- A. Manufacturer's catalogs: The acceptable manufacturer's current catalog at date of bidding documents is incorporated by reference to the same force and effect as if repeated herein at length.

1.1. SUBMITTALS

- A. Make all submittals in accord with 01340.

B. Product data:

1. Materials description - three (3) copies.
2. Manufacturer's current printed installation instruction for each product - three (3) copies.
3. ASTM-C-642 Test Record - three (3) copies.

1.2. DELIVERY, STORAGE & HANDLING

- A. Deliver all materials in manufacturer's original containers, with seals unbroken, labels, and product's and manufacturer's names intact and legible.

- B. Store all products in a manner to prevent damage, in a secure place, out of way of construction operations. Provide protection until ready for use.
- C. Handle in accordance with manufacturer's recommendations.

1.3. SEQUENCING/SCHEDULING

- A. Install prior to the installation of the new roofing.

1.4. WARRANTY

- A. Contractor's Warranty
 - 1. One (1) year in accordance with General Conditions.

2. PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS. Use only the specified product of the following manufacturers:

- A. Evonik Industries (630) 393-1919, ext. 21
- B. ProSoCo (800) 255-4255
- C. Chemprobe Technology, Brookfield, IL (708) 387-0305

2.2. EXTERIOR MASONRY SEAL - ACCEPTABLE PRODUCTS

- A. Alkyltrilkoxysilanes with activator
 - 1. Protectosil Chem-Trete PBVOC
 - 2. ProSoCo Sure-Klean Siloxane WB
 - 3. Chemprobe Dur-A-Pel 10
- B. Products that are diluted on site are not approved for this job.

3. EXECUTION

3.1. PROJECT/SITE CONDITIONS

- A. Masonry shall be clean of foreign deposits and shall be dry. The determination of percent of dry shall be in accordance with the project manufacturer's recommendation.
- B. Environmental conditions:
 - 1. Weather: Do not install products during adverse weather conditions.
 - 2. Temperature: Ensure that surface and ambient temperatures are within the range recommended by the manufacturer.

3.2. INSPECTION

- A. Thoroughly inspect all existing construction and the conditions under which the work will be performed.
 - 1. There is no apparent masonry repair work known to Architect.
- B. Report to the Architect/Engineer IN WRITING all conditions that would adversely affect installation of the work.
 - 1. Do not install material on surfaces that are not clean or on surfaces that need additional tuck point work. The Architect did not note any areas that needed tuck pointing. If tuck pointing is needed, contact Architect.
- C. Verify that all pre-application conditions are reasonably in accord with manufacturer's recommendations.
- D. Start of work constitutes acceptance of the construction and conditions.

3.3. PREPARATION

- A. Clean and prepare in accordance with Manufacturer's instructions. Remove all loose materials and other foreign matter which might impair penetration.
- B. Protect plants, wood trim, glazing, etc. that may be adversely impacted by the water repellent.

3.4. SCOPE INCLUDES

Pressure wash brick on all selected roof level elevations, not for appearance but to accomplish the proper tuckpointing.

- 1. Use lowest spray pressure that will accomplish the job.

Grind and repoint 70 lineal feet total of deteriorated or cracked mortar joints on the selected areas.

- B. Cracked brick shall be left in place and crack sealed with clear sealant.
- C. Cut out and reseal all vertical expansion joints on the selected wall areas.
- D. Apply two (2) saturation coats of water repellent to all brick on the selected areas after repairs are performed.
- E. Clean up and demobilize all equipment and debris.

3.5. INSTALLATION

- A. Comply with the Product Manufacturer's printed instructions.
 - 1. Installation shall follow the Manufacturer's recommended procedures corresponding to the installation procedure for a ten (10) year application guarantee.
 - 2. See paragraph 1.7 of this section.
 - 3. Application shall follow sealant and caulking application at wall penetrations.

- B. SPILLAGE
 - 1. Do not allow compounds to overflow or spill onto adjacent building material which may be subject to damage.
 - 2. Use catch sheets or other precautionary devices to prevent staining of adjoining surfaces as shall become necessary.

3.6. CURING

- A. Cure applied compounds in compliance with manufacturer's instructions.

- B. Comply with required environmental conditions pursuant to post application as recommended by the Product Manufacturer.

3.7. INSPECT & CLEAN UP

- A. Carefully examine all work to confirm installation compliance and adequacy of application.

- B. Clean up. Remove all surplus products, containers and rubbish and dispose of off site.

END 07190

DIVISION 7 – THERMAL & MOISTURE PROTECTION
Section 07200 – Insulation

1. GENERAL

1.1. REQUIREMENTS INCLUDE

A. Base Bid

The Contractor shall provide insulation as shown on the Drawing and as specified herein, associated with the reroof work. Poly-isocyanurate attachment methods and taper requirements are listed on Drawing Sheets - systems vary by building and area.

B. Meet or exceed FM, I-90 uplift. 72 mph wind speed warranty. ANSI / SPRI ES-1 over 24-gauge metal decking.

C. Roof Area F

1. Remove ballast which covers most of the Roof Area.F. Remove the existing 60 mil EPDM adhered to the insulation described in Section 1.D.2 (below).
2. Existing fiberglass faced isocyanurate insulation is loose laid over existing poured lightweight cement insulation over metal pan structure. Remove existing one layer of 2 ½" isocyanurate Insulation.
3. New 2 layers of 2 ½" fiber faced isocyanurate to be foam adhered or mechanically fastened to the existing cement base insulation described above. This new insulation to have 25 psi compressive strength over full area. Adhere new coverboard to insulation.

D. Roof Area F-1

1. Remove the existing 60 mil EPDM Roof.
2. Existing fiberglass faced isocyanurate insulation is mechanically anchored into metal deck. This insulation varies in thickness from 3" to 5". Install new isocyanurate over this material
3. New top layer of 1 ½" isocyanurate insulation mechanically anchored to the metal deck. Total insulation will be 4 ½" to 6 ½".
4. Insulation to have 25 psi compressive strength. Adhere new coverboard to insulation.

E. Roof Area G

1. Remove ballast. Remove EPDM roof covering. Remove existing insulation down to the lightweight concrete.
2. Adhere new insulation to the light weight concrete. Insulation will be 2 layers 2 ½" isocyanurate.
3. Install 1/16" /ft crickets between roof drains. See Roof Plan.
2. Insulation to have 25 psi compressive strength. Adhere new coverboard to insulation.

F. Roof Area G-1

1. Remove existing EPDM roof, and remove existing insulation.
2. New insulation to be 2 layers of 2 ½" isocyanurate.
3. Install 1/16" per foot cricket between roof drains as shown on plans.
4. Insulation to have 25 psi compressive strength. Adhere new coverboard to insulation.

G. All areas to receive ½" Dens Deck cover board.

1.2. RELATED WORK

A. Specified elsewhere

1. 06100 - Rough Carpentry
2. 07530 - EPDM Elastomeric Membrane Roofing

1.3. SUBMITTALS. Submit Manufacturer's Literature in accordance with 01340 (materials description and installation instruction for each type insulation).

1.4. PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Handle and store in such a manner as to prevent damage. Store under cover and above ground. All damaged or otherwise unsuitable material, when so ascertained, shall be immediately removed from the job site.
- B. Store all materials supported by blocking runners 4" above bearing surface.
- C. Maintain stored insulation weather free. Provide and maintain repellent poly protection cover secured against blowing rain.
- D. Tie down and secure against wind damage.

1.5. WARRANTY

- A. Insulation system shall be included in the roofing manufacturer's full system warranty paragraph for roof insulation, total assembly.
 1. See Section 07530 for warranty requirements.
- B. Other insulation applications, one (1) year.

1.6. EXISTING CONDITIONS

- A. See General Conditions Section 1.11 on previous page.

2. PRODUCTS

2.1. MATERIALS

- A. Polyisocyanurate Insulation Specification

1. Federal specification HH-I-1972/Gen, HH-I-1972/2, ASTM C-1289-02
 2. Factory Mutual Class 1 per FM 4450.
 3. Conditioned 'R' value 5.88 minimum per inch per ASTM C 518 Test methods and PIMA Conditioning Procedure 101 or RICTIMA Bulletin 281-1.
 4. Fire exposure: UL 790 external risks, UL 120, UL123 for internal risks for roof deck application only.
 5. New insulation to have 25 psi compressive strength.
 6. Compatibility and inclusion: Insulation system must comply with roofing manufacturer's standards for uplift, delamination, warranty and general compatibility.
 - a. Comply with warranty requirements for full system warranty.
 - b. Coordinate material selections for full system warranty.
 - c. System aged R value to meet or exceed 2012 Illinois and International Energy Code as a minimum R-25. Existing insulation is less than required.
- B. Constant thickness insulation – poly-isocyanurate core board.
1. Description - base insulation
 - a. New 2 1/2" fiber reinforced facers, sheet size, 4' X 8' preferable, top layer 4' X 4' board sheets. Adhesive adhered new insulation lightweight cement to insulation. Mechanically anchored new insulation with existing insulation may be done if it complies with 30 year warranty.
 - b. Multiple layers where noted on the Drawings and as recommended/required by roof system Manufacturer to complete and warrant the work.
- C. Tapered insulation – poly-isocyanurate core - Use only as necessary to accomplish drainage and as needed for crickets; see also Roof Plan for starting thicknesses. Existing metal deck is sloped for drainage. Existing crickets are to remain. New crickets to be added as shown to eliminate puddeling.
1. Description
 - a. One-half inch (1/2") minimum starter thickness.
 - b. Provide a wood fiber transition starter 0" to 1/2" along all edges.
 - c. Fiberglass facer - both surfaces.
 - d. Taper varies 1/8", 1/4" for roof areas and 1/16" for crickets – see Plans.
 - e. Wood fibered transition strip 0" to 1/2" (no step) at crickets and/or saddles.

D. Cover Board – Dens Deck Prime

1. ½" thick board with fiberglass mat both sides bonded to high density gypsum core.
2. Manufactured to meet ASTM C1177
3. Mold resistance meeting ATSM D3273
4. Weight: 2.0 psf. Permanence > 35. R value .56. Water absorption <10%.
5. Dens deck applied by adhesive to new polyisocyanurate insulation with scrim facing.
 1. Cover board adhered to new insulation in all conditions.

2.2. ATTACHMENT PRODUCTS

- A. Urethane foam (for adhered areas only), adhesive as required by system manufacturer over gyp, tectum, concrete, light weight concrete, or other deck types as appropriate.
1. Provide adhesive to achieve FM I-90 uplift attachment.
 2. FM approved adhesives that will achieve FM I-90 uplift anchorage and that are compatible with the roofing membrane and maintenance system warranty requirements. ANSI / SPRI ES-1 90 mph wind speed.
- B. Fasteners for existing insulation. Screw fasteners may be used to secure existing insulation to existing metal deck.
1. Fasteners as required for adhered roof guarantee for all un-ballasted roofing applications, mechanical anchorage, at metal and wood decks.
 - a. Provide rust resistant mechanical fasteners to achieve FM I-90 uplift attachment. secure insulation to I-90 standards with screws into metal decking
 - b. Optional, FM approved adhesives that will achieve FM I-90 anchorage and that are compatible with the roofing membrane and maintenance system warranty requirements.
 - c. Size screws for the application, one inch (1") penetration through lower deck flutes, maximum (metal or wood) decking.
- C. Concrete pavers for walk surface and ballast at areas shown on Plans.
1. Acceptable smooth trowel finished concrete pavers to be used as shown on Plans. Paver applied rate to be not more than 15 lbs./sq.ft. over any area.

- a. Non-interlocking concrete pavers, weighing a min. 10 lbs./sq.ft., and are about 24" x 24", which are to be warranted for performance for (wind and weather to equal roof warranty) Base Bid thirty (30) years.
- b. Roof protection under all pavers to be min. Roof Manufacturer's 60 mil EPDM sacrificial sheet between pavers and roof membrane. Protection to extend six inches (6") beyond paver area.
- c. Provide 600 pavers for this project to be located as shown on plans. Place 2' paver then 2' space as shown.

2. Product

- a. Westile Inc., 8311 W. Cardner Court, Littleton, CO 80125, phone (800) 433-8453.
- b. Illinois Brick Co., 800 S. Ninth, Springfield, IL 61832, Tel. 217/621-7524.
- c. Color: Standard Grey
- d. Use paver product approved by Roofing Manufacturer.

3. EXECUTION

3.1. DETAILS

- A. Drawings depict anticipated conditions and minimum standards of assembly.
 1. Detailing does not exhaust every possible condition which may be encountered, but rather establishes a standard of application.
 2. The details establish minimum requirements, where same exceed the manufacturers minimum standard they shall govern, in the event the manufacturer has a required detail assembly for warranty that exceeds the detailing, warranty requirements shall govern.
 - a. Notify the Architect if not described on submittals.

3.2. INSTALLATION

- A. Mechanically anchor:
 1. The existing insulation shall be mechanically anchored per the membrane manufacturer's requirements.
 2. Fasteners to be membrane manufacturer branded or approved.
 3. Use on the existing insulation only which is fiberglass scrim faced isocyanurate board.
 4. Spacing pattern for I-90 with 2" top board.
 5. Mechanical anchoring of the entire insulation depth of five inches (5") will be accepted if meets requirements for 30 year warranty.

- B. Adhesive attachment
 - 1. It is the intent that the new top layer polyisocyanurate insulation and cover board be foam attached to I-90 standards to existing insulation which is to be mechanically anchored; if this meets warranty requirements.
 - 2. This includes the base bid insulation and the high density (or Dens-Deck) cover board.
- C. Install tapered and fill systems as shown and when needed as bottom course of insulation; install fiber faced constant thickness insulation on top surface to receive roofing system.
- D. Inspect for proper installation:
 - 1. Tight side and edge.
 - 2. Offset joints in layered application.
 - 3. Do not use broken boards.
 - 4. Fill in chipped or damaged spots in insulation.
- E. Protect properly to prevent crushing, delamination or abuse to insulation systems during subsequent operations.
- F. Taper systems shall be installed as true as specified, slope all ways from roof drains, one (1) way from gutter. See plans for roof layout.
- G. Install 5" polyisocyanurate fill insulation in removed Chemical Air Fan opening and also in removed Vent above Stage area.

END 07200

DIVISION 7 – THERMAL & MOISTURE PROTECTION
Section 07530- EPDM Elastomeric Membrane Roofing

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. The Contractor shall provide single ply 90 mil EPDM synthetic rubber fully adhered roofing with flashing system(s) as shown on the Drawings and specified herein, and related work for perimeter edge and flashing of equipment onto new roof. Included in total system NDL Manufacturer's warranty – FM, I-90 min. uplift, 72 mph wind speed and ANSI / SPRI ES-1. Double seams, six-inch (6") cover or seven-inch (7") double sided seam tape in addition to minimum manufacturer's required field and flashing seam throughout entire roof project / areas.
1. For Roof Area F, F-1, G, and G-1.
- B. Adhered: Areas, 90-mil EPDM adhesive system, perimeter detail and counter flashing as detailed. Perimeter paver ballast and paver walkways. FM, I-90 uplift and 72 mph wind speed. Double-seaming and Manufacturer's 30-year NDL warranty.
1. Tear off existing roof material and inspect existing iso insulation on metal deck and concrete deck.
 - a. See Section 02072 and 07200 Paragraph 1.1.
 - b. Remove existing roof system, lead safings, flashing, counter flashing and edge metal. Insulation to remain on Roof Area A, B and C. Roof Area D and E to be removed down to lightweight concrete deck.
 - c. Provide appropriate tie in and flashings and repairs to keep tie in water tight and serviceable during installation.
 - d. Provide certification of proper tie in for warranty approval.
 - e. Roofing Systems shall be warranted for thirty (30) years total system new materials.
 2. Provide new materials as shown on the detail drawing sheets.
 - a. Insulation (07200)
 - b. New piping support stands as noted on roof details (N.I.C.).
 - c. Roofing membrane
 - d. Resilient flashings
 - e. Metal cap flashings (07600)
 - f. Counterflashing and termination bars
 - g. New edge metal.
 - h. Wood blocking addition extensions and reconstruction
 - i. Three inch (3") with six inch (6") cover, double seam, or seven inch (7") double sided seam tape.
 - j. Adhesives and accessories, top quality butyl adhesive and accessories required for Manufacturer's total system Warranty.

1.2. RELATED REQUIREMENTS

A. Specified elsewhere

1. 01010 - Project Summary
2. 02072 - Minor Demolition for Remodeling
3. 06100 - Rough Carpentry
4. 07200 - Insulation
5. 07600 - Sheet Metal Flashing & Trim

1.3. MECHANICAL AND ELECTRICAL WORK

A. Plumbing vent extensions and electrical work only if required to execute work.

B. Gas piping modifications as noted on roof plans. Existing 4" gas piping to be removed (approximately 326').

1. Repair/replace brick at north end.

1.4. DEFINITION ROOFING SYSTEM MANUFACTURER. Any of the manufacturers whose systems are specified under "Acceptable Systems" in this Section, and herein called "Manufacturer".

1.5. QUALITY ASSURANCE

A. Qualifications

1. Installers shall be experienced craftsmen, skilled in the installation of the specified products set forth in these and related documents.
2. Contractor shall:
 - a. Have a minimum of five (5) years experience as certified applicator for this or for like roofing systems specified in this document and shall be certified by the Product Manufacturer whose product is to be installed.
 - b. Be certified by the State of Illinois in accord with the Illinois Roofing Industry Licensing Act, as amended. (Illinois Revised Statutes ch. 111, Par. 7501 et seq.)

B. Requirements of regulatory agencies

1. Permits:
 - a. No charge for Town of Normal permit.
 - b. Architect will file forms for Regional Office of Education permit – no charge to Contractor. Note: To meet legal requirements in the State of Illinois including any municipalities, the Regional Office of Education permit is required.
2. Tests or standards by independent agencies whose classifications

and requirements have general acceptance as regulatory:

- a. American Society for Testing and Materials (ASTM).
- b. Factory Mutual Laboratories (FM).
- c. National Fire Protection Association (NFPA).
- d. Underwriter's Laboratories, Inc. (UL).

C. Source Quality Control - The Roofing System Manufacturers shall assume full responsibility for certifying that:

1. Prior to the start of work and material acquisition, the Contractor shall submit a letter to certify that the manufacturer has reviewed the project and:

- a. They have examined project drawings, specifications and warranty requirements.
- b. Their products herein specified are acceptable for and compatible with the roofing and flashing system design.
- c. If their system is used, they certify that all products delivered to the site will meet or exceed project specification requirements.
- d. They will issue the specified thirty (30) year warranty for the final roofing system as installed in accordance with the documents.
- e. See Specification Section 01030 Alternate Bids.

D. Referenced catalogs: The catalogs, current as of date of bidding documents, of the manufacturers specified are incorporated herein by reference.

1.6. SUBMITTALS. Make all submittal in accordance with 01340.

A. Roofing firm endorsements: At least fifteen (15) business days prior to starting the work submit roofing firm's name, address, telephone number and Manufacturer's endorsement of roofing firm to Architect/Engineer.

1. The Manufacturer's endorsement must indicate that the roofing firm is a qualified installer of the products used.

B. Shop drawings

1. Submit shop drawings of Roofing System Manufacturer for approval.
2. Submit only system manufacturer approved shop drawings to Architect/Engineer.
3. Minimum scale: 1-½" = 1'-0" for details except where otherwise specified.
4. Submittal shall incorporate the Architect/Engineer prepared documents, that is, Drawings and these Specifications, wherein said documents exceed the Manufacturer's recommendations.
5. Include wherein applicable:

- a. Resilient flashing, cap and counterflashing details.
 - b. Gutters/scuppers/perimeter curb related sheet metal.
 - c. Fasteners.
 - d. Expansion and control joints.
 - e. Mechanical/electrical equipment curbs.
 - f. Copings.
 - g. Flashing of extended roof curbs.
 - h. Flashing of through roof pipes and columns where applicable.
6. See Section 07200 Insulation for submittal requirements.
- C. Product data
- 1. Insulation.
 - 2. Joint seal or tape. (Self-adhering battens, etc.)
 - 3. Manufacturer's specification and instruction manual for all components of roofing system.
- D. Samples wherein same are applicable to the project
- 1. Constant thickness isocyanurate insulation: two (2) pieces 12" X 12".
 - 2. Tapered isocyanurate insulation: Two (2) 12" X 12".
 - 3. Sheet metal in conjunction with roofing: two (2) pieces of each type, 4" X 4".
 - 4. Membrane: two (2) pieces 12" X 12".
 - 5. Fabricated metal flashing end caps, miters and flashing lap systems and covers: one (1) assembled sample each configuration.

1.7. PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials in Manufacturer's original, unopened containers and rolls with all labels intact and legible.
- B. Deliver materials requiring fire resistance classification packaged with labels attached as required by labeling service.
- C. Deliver materials in sufficient time and quantity to allow continuity of work and compliance with approved construction schedule.
- D. Handle rolled goods in manner to prevent damages to edges or ends.
- E. Store all materials on clean raised platforms with weather protective covering when stored outdoors.
- F. Store rolled goods in accordance with Manufacturer's instructions.
- G. Provide continuous protection of materials to prevent damage or deterioration due to weather.
- H. Remove damaged or defective materials from site.

- I. Comply with fire and safety regulations.
- J. Follow Manufacturer recommendations as minimum except where contract documents exceed Manufacturer recommendations. Where Contract Documents are in excess of the Manufacturer recommendations, the contract documents supersede.
- K. PROTECT INSTALLED MATERIAL FROM TRAFFIC DAMAGE BY COVERING ALL ROOF TRAFFIC BY 3/4" THICK SHEATHING PLYWOOD IN ADJACENT 4' X 8' SHEETS LOOSE LAID EMPLOYING CARE NOT TO DAMAGE ROOFING MATERIALS. KEEP THE AREA UNDER THE TRAFFIC BOARD FREE OF ALL OBJECTS.
 - 1. Provide puncture protection mat under plywood and six inches (6") beyond plywood all around.
 - 2. Remove mat at conclusion of work.

1.8. JOB CONDITIONS

- A. Contractor to avoid concentrated material loads. DISTRIBUTE LOADS AND ALWAYS ACROSS JOISTS -- NEVER PARALLEL WITH FRAMING MEMBERS.
 - 1. Max. load 30 lbs. per sq. ft.
- B. Environmental requirements: Except as otherwise authorized by Architect/Engineer, follow Manufacturer's written request for variance:
 - 1. Apply roofing in dry weather.
 - 2. Apply roofing only when dry substrata and substructures prevail.
 - 3. Provide all required removal work in a dust free manner.
 - 4. Provide watertight tie-off at the end of each work day.
 - 5. See also Section 02072.
- C. PROTECTION
 - 1. AVOID HEAVY TRAFFIC ON COMPLETED WORK.
 - a. TRAFFIC CORRIDORS, THOSE AREAS FROM HOISTS TO WORK APPLICATION AREAS, SHALL BE TEMPORARILY COVERED WITH 3/4" X 4' WIDE PLYWOOD BEGINNING WHEN INSULATION IS FIRST INSTALLED.
 - b. TRAFFIC CORRIDORS SHALL BE CONTINUALLY PROTECTED UNTIL FINAL INSTALLATION OF MEMBRANE AND BALLAST, WHEN APPLICABLE. SEE DETAIL DRAWINGS.
 - 2. Restore to original condition or replace all work or materials damaged by roofing operations whether a part of the work of this Contract or adjacent thereto.

3. Protect paving and building surface(s) adjacent to hoists and other roofing equipment.
4. Remove protection upon completion of roofing work.
5. Protect existing roofs on this building that are not included in this work, from all damage.

D. Sequencing and scheduling prior to commencement of work.

1. Contractor: Provide detailed schedule of all roofing operations.
2. Designate an on site foreman in charge of operations.
 - a. Provide experience record for the roofing foreman upon request by the Architect/Engineer.
 - b. The Contractor's Roofing Foreman shall be subject to the approval of the Architect/Engineer on behalf of the Owner. Said approval shall be based upon previous experience record.
 - c. The Contractor's on site foremen shall be the Contractor's assigned Safety Manager for the project unless the Contractor makes a specific assignment in writing otherwise.
 - d. The assigned foreman in charge of site operations and safety shall be on the job at all times during construction.
3. The Roofing Contractor's Project Manager and On Site Foreman shall assign and coordinate all operations of the Roofing Contractor, his Subcontractors and his Suppliers for the work in the Contract Documents.

1.9. WARRANTY

A. Contractor shall provide the following minimum warranties:

1. Contractor: One (1) Year Warranty from date of Substantial Completion.
2. Manufacturer: On the new roof system, provide a thirty (30) year total system, NDL, comprehensive Manufacturer's Warranty customized to the specific warranty requirements of these documents. Maximum allowed by Manufacturer for system type.

B. Coverage shall be pursuant to the following inclusions:

1. Materials and workmanship - thirty (30) year total system warranty.
 - a. Inclusive of EPDM roofing membrane.
 - b. Inclusive of resilient flashing cured and uncured.
 - c. Inclusive of attachment systems.
 - d. Inclusive of insulation system (except existing insulation).
 - e. The warranty period shall commence upon total completion of all roofing and flashing, both resilient and sheet metal work, and Contractor proof of being paid in full.
 - f. The warranty shall have no deductible limit.

- g. The basic meaning of the Warranty shall be to maintain the building interior free of water or moisture penetration from the exterior through the membrane or flashing system.
- h. The Contractor shall make adjustments to the application as your selected manufacturer requires, such that the warranty for all new components in the assembly are included. If foam down to existing insulation mechanically attached is not acceptable and the manufacturer requires a new cap layer of Dens glass, isocyanurate insulation board or similar over the existing to mechanically attach through, provide same in the base bid, as required to get the warranty on the foam down system specified. The documents identify the minimum standard required by this contract, not necessarily pre-approved by all manufacturers.

2. Terms, conditions and limitations.

- a. Installation of roofing system must be by a contractor approved by the Manufacturer.
- b. During the term of this maintenance free Warranty, Manufacturer shall have access to the roof for inspections during normal business hours. Manufacturer shall furnish his own ladders where applicable.
- c. Owner shall furnish the Manufacturer a written notice of any defect or leak in the roof and of any claim under this Warranty within thirty (30) days of the discovery of the defect or leak in the roof. Such notice shall be given by fax and/or mail to the Manufacturer. The Manufacturer shall provide the Owner with the applicable addresses, telephone numbers and technical personnel to be so notified and keep the Owner updated on such information throughout the warranty period.
- d. If there is a failure of materials or workmanship within the scope of this Warranty, the Manufacturer shall repair the defect.
 - 1) The remedy stated herein is the SOLE AND EXCLUSIVE REMEDY for defects or failure of the materials supplied by the Product Manufacturer and workmanship supplied by the Contractor.
 - 2) Manufacturer shall under no circumstances be liable for incidental or consequential damages including, but not limited to, damages to building or building contents, except wherein notice has been given to the Manufacturer and Manufacturer's authorized service personnel does not respond and commence repair within twenty (20) business days following notification and continue said repair in uninterrupted sequence.
 - 3) Wherein Manufacturer does not respond within fifteen (15) business days to notice of defect, the

Manufacturer shall become liable for incidental and consequential damages including building and building contents.

- e. This Warranty shall not be applicable to damage or loss caused in whole or in part by:
 - 1) Natural disasters, including but not limited to lightning, gales, hail and/or hurricanes in apparent wind in excess of 72 mph, or similar natural disasters.
 - 2) Vandalism, acts of war, or civil disobedience.
 - 3) Alteration of roof or installation of structures, fixtures, or utilities on or through the roof without prior written approval of the Manufacturer.
 - 4) Non-typical or unusual environmental fallout or manufacture in building of commercial/industrial solvents, acids, caustic fluids, oils, waxes, greases, absorbent clays, bleaches or plasticizers.
 - 5) Failure by the Owner or lessee to use reasonable care in roof maintenance (as provided by the Manufacturer which carefully, thoroughly describes proper and improper maintenance procedures).
 - 6) Traffic or storage of materials on the roof that inflicts physical damage.
 - 7) Infiltration or condensation of moisture in, through, around or above the walls of the building.
 - 8) Acts of parties other than personnel of the manufacturer or the authorized Contractor.

- f. Manufacturer shall have the right to suspend its obligations under this Warranty if all bills for installation, supplies and services have not been paid in full to Contractor following materials in installation acceptable to Architect/Engineer per Contract Documents.

2. PRODUCTS

2.1. MATERIALS. For the entire system, use materials either manufactured by or certified as compatible by one of the acceptable system manufacturers. EPDM shall be 90-mil thickness.

2.2. Roofing Membrane System

A. Rubber Membrane .090" / 90 mil EPDM adhered rubber system.

- 1. Carlisle Syn Tec Systems, Carlisle, PA
- 2. Johns – Manville, JN EPDM NR, jm.com
- 3. Firestone Building Products, Co., Carmel, IN - Firestone Rubbergard

- B. Resilient Flashing: 90-mil uncured formable EPDM shall be of same source by name as the membrane system.
 - 1. Use only where required for manufacturer's warranty.
- C. Reinforced edge strip (RUSS) or (RS), EPDM 6" wide.
 - 1. Where required for edge anchorage.
- D. Adhesives
 - 1. Adhesives for adhering membrane shall be the manufacturer recommended contact type adhesive for the substrate condition.
 - 2. Seam adhesive shall be the membrane manufacturer's top grade butyl base type contact seam adhesive or manufacturer self vulcanizing seam tape.
- E. Seam sealant and seam tape shall be manufacturer's recommended seam sealant or tape.
 - 1. Min. three-inch (3") seam tape, with six-inch (6") cover – ALL SEAMS. One (1) 7" wide seam tape may be used in lieu of 3" and 6".
 - 2. Provide necessary seam work or seam primers as recommended.
- F. Anchor bars
 - 1. Manufacturer's recommended type as a minimum standard unless detailed otherwise.
 - 2. See drawings for heavier or stiffer bar anchors at detailed conditions.
 - 3. Conditions not detailed but similar to detailed conditions shall be handled with similar bar anchor materials.
 - 4. Finishing termination bars must be approved by Roofing Material Manufacturer.
 - a. Metal Era Inc.: CB-175 1/8" X 1-3/4" punched - maximum 8" o.c.
 - b. Metal Era Inc.: CB-14 1/4" X 1" punched - maximum 6" o.c.
 - c. Lucas Sales: #L-90 extruded aluminum punched--maximum 6 o.c.
 - d. Metal Era, Inc.: CB-175, 1 1/2" double-bevel, 1/8" extruded bar, snap-on face.
 - e. Metal Era, Inc.: DB-40 Kynar finished, dark bronze.
 - 5. First and last anchor hole in any bar segment shall be 1" from ends.
- G. Concrete Pavers specified in Section 07200/2.2.C.
 - 1. Paver location shown on Drawings.
 - 2. Acceptable smooth trowel finished concrete pavers to be used in

conjunction with river rock. Paver applied rate to be not more than 15 lbs. / sq. ft. over any area.

- a. Roof protection under all out pavers to be min. Roof Manufacturer's 60-mil EPDM sacrificial sheet between pavers and roof membrane. Protection to extend six inches (6") beyond paver area. Paver size 24" X 24".

3. Product

- a. Westile Inc., 8311 W. Cardner Court, Littleton, CO 80125, phone (800) 433-8453.
- b. Illinois Brick Co., 800 S. Ninth, Springfield, IL 61832, Tel. 217/621-7524.
- c. Color: Standard Grey
- d. Use paver product approved by Roofing Manufacturer.
- e. Total of 600 pavers for roof area A, B, C, D, & E.

H. Walkway Pad

1. Physical Characteristics

- a. Pad size is 30" x 30" x .300"
- b. Approved Seam Tape is factory laminated to walkway pads: 3 rows of 3" wide tape, or 2 rows of 7" wide tape.

3. EXECUTION

3.1. NIGHT CUT OFF (See 1.1. of this Section).

- A. Provide tie-off per EPDM Manufacturer's recommendations between new/old roof or deck system each day, watertight and wind resistant.
 1. Cut back cut off for proper extensions of each days' work. Inspect resulting deck following tear-off for structural condition.

3.2. BLOCKING AND ANCHORAGE. Where Drawings Sectional Details do not account for surface of the insulation and surface of the wood blocking lying in same plane and wherein same is a Manufacturer's requirement, the Contractor shall so provide by tapering wood blocking so the concealed base EPDM anchor shall be screwed into the wood blocking as detailed. This requirement applies to perimeters, curbs, parapets, equipment rails, saddles and crickets as shown on the drawings specifically or reasonably inferred by similarity.

3.3. INSPECTION

- A. Verify that all work of other Subcontractors that penetrates roof deck or requires men and equipment to traverse roof deck has been completed. Protect all reroof work from traffic damage.
- B. Examine all surfaces for inadequate anchorage, foreign material, moisture, unevenness or other conditions that would prevent execution and quality

of installation of specified roofing and flashing system and accessory items.

- C. Do not issue a "Proceed Order" to the Subcontractor or proceed with work until all defects are corrected to the satisfaction of and with the written approval of the roof system manufacturer.

3.4. PREPARATION. Thoroughly clean all surfaces against or into which work will be installed. Ensure that all surfaces are clean and dry before starting and during performance of work. Follow roofing system manufacturer's recommendations.

3.5. INSTALLATION

- A. Install roofing and flashing system(s) and all accessory items in strict accordance with system Manufacturer's printed instructions current at date of bidding documents.

- B. Contractor may employ membrane manufacturer's standard details in lieu of details shown on Drawings, **ONLY** upon confirmation IN WRITING to the A/E that the Manufacturer's system exceeds the quality, longevity and future ease of replacement of the system detailed on the Drawings, otherwise these specifications and accompanying drawing shall control materials and installations.

- C. **Double lap all field seams** with second top lap. Provide additional material; tape/uncured and sealed. (i.e. strip in all seams after basic seam is completed).

1. Use minimum 3" seam tape with six inch (6") cover tape or one (1) 7" double seam tape..
2. Top lap to be included in warranty.

- D. Sealhead stainless steel screws shall be secured in all pre-punched (or drilled) holes in 07530/2.2.F finishing anchor bars.

- E. Application of Walkway Pads:

1. Position the QuickSeam Walkway Pads so that the flat surface is over the completed membrane, spacing each pad a maximum 6" from each other to allow for drainage.
2. Avoid the installation of Walkway Pads over field fabricated seams or within 3" of a lap edge. The seam must be stripped in using 6" QuickSeam Batten Cover. The QuickSeam Batten Cover must extend beyond the walkway pad a minimum of 6" each side of the pad.

3.6. EXISTING ROOFS

- A. **DO NOT CONCENTRATE STORAGE OF ANY MATERIALS ON EXISTING ROOFS (NOT IN SCOPE OF WORK) OR ON ANY AREA OF NEW ROOF. SPREAD OUT LOADS OF STORED MATERIAL.**

- B. WORK ON EXISTING ROOFS (Replacement in 2020)

1. Remove 4" gas pipe 326' (verify) and repair/replace brick in south end (north wall of north Fan Room. Interior 4" pipe removed.
2. Remove 5 (five) abandoned equipment rails on Roof Area G (see Plan). The north equipment rail is imbedded in masonry wall. Repair masonry and wall flashing.
 - a. Install polyiso insulation and 90 mil EPDM patch over 5 (five) removed rails to continue Firestone 20 year warranty on this roof.

3.7. FIELD QUALITY CONTROL

- A. Roofing System Manufacturer will provide on site observation and instruction as the Manufacturer deems necessary.
 1. Adjustments in the system design necessary to meet manufacturer's requirements for guarantee are subject to Architect's approval and shall be included at no additional charge.
- B. Carefully clean surfaces prior to applying adhesives.
- C. Proper fit and lay out membranes.
 1. Avoid wrinkles.
 2. Avoid bubbles.
 3. Install without stretching or applying under stress.
 4. Handle carefully to minimize patching.
 5. Keep seam adhesives in proper alignment to avoid seam sealant over adhesive.
 6. Carefully apply contact adhesive in a thin uniform manner.

3.8. ADJUST & CLEAN

- A. Carefully inspect all completed work. Correct all defects.
- B. CLEAN UP SPILL, DEBRIS AND REMOVE SURPLUS MATERIALS AT THE END OF EACH DAY.
- C. Provide adequate protection of completed work until substantial completion. Prevent traffic, storage of materials or equipment on completed roofing. Finally, remove 3/4" thick X 4' wide plywood from traffic lanes over complete membrane installation.
- D. Prevent storage of materials or equipment on the completed roof.
- E. Finally clean up all rubbish, debris, surplus materials, tools and equipment and remove from the site.
- F. Provide manufacturer inspection and warranty paper work.

END 07530

DIVISION 7 – THERMAL & MOISTURE PROTECTION
Section 07600 – Sheet Metal Flashing & Trim

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Contractor shall provide metal flashing inclusive of trim, associated with the reroof work as shown on the Drawings and specified herein. Aluminum gauge as noted on Details; color – mill. All finish colors are listed on coordinating detail drawings.
- B. Contractor shall verify on site flashing and trim dimensions to accomplish the design intent of the drawing details.
- C. New edge flashing (trim) to be provided to be compatible with 30-year warranty by Roofing Material Supplier.

1.2. RELATED WORK

- A. Specified elsewhere
 - 1. 01010 - Project Summary
 - 2. 06100 - Rough Carpentry
 - 3. 07530 - EPDM Elastomeric Membrane Roofing
 - 4. 07900 - Sealant & Caulks

1.3. QUALITY ASSURANCE

- A. Sheet metal flashing and trim shall conform with the following:
 - 1. Specified requirements of the manufacturer of the metal.
 - 2. Recommended practices contained in "Aluminum Construction", from the Aluminum Association, 750 Third Avenue, New York, NY 10017, latest edition.
 - 3. Anodized quality ASTM B-136, ASTM-B-137 or ASTM-B-244.

1.4. REFERENCE STANDARDS

- A. ASTM B209-79, Alloy 3003-H14: Aluminum
 - 1. H-24 temper where required for spring action. See details on the Drawings.
 - 2. See Drawings for thickness.
- B. ASTM A617-77, Type 304: Stainless Steel.
 - 1. 2D finish, dull, cold-rolled, annealed.
 - 2. See Drawings for location, configuration and thickness.

- C. ASTM A446 zinc coated (galvanized) sheet steel.
 - 1. Box annealed steel
 - 2. Zinc coating, G-90 (1.25 oz.).
 - 3. See drawing for thickness.
 - 4. Top coating in accord with AAMA 621-96 Standards.
- 1.5. SUBMITTALS. Make all submittals in accord with 01340. Submittals are not returnable.
- A. Product data:
 - 1. Manufacturer's Literature: Materials description and current printed installation instructions for manufactured items.
 - 2. Shop Drawings: Typical details of fabricated and formed configurations.
 - B. Samples:
 - 1. Aluminum: One (1) "assembly ready" piece of each configuration.
 - 2. Stainless Steel: One (1) "assembly ready" piece of each configuration.
 - 3. Pre-finished, galvanized steel: One (1) "assembly ready" piece of each configuration.
 - 4. Fabrication Samples:
 - a. Provide one (1) assembled sample five-inch (5") wide of splice covers, and caps, inside and outside mitered cap corners.
 - b. Provide one (1) sample of soldered or welded corner flashing as set forth in the Drawings.
- 1.6. DELIVERY, STORAGE & HANDLING
- A. Deliver products to site in accordance with Section 01600. Store all products in a manner to prevent damage, in a secure place, out of way of construction operations. Provide protection until ready for use.
 - B. Handle in accord with manufacturer's recommendations.
- 1.7. WARRANTY.
- A. The Contractor shall warrant metal flashing and trim to be free of faults and defects for two (2) years from date of Substantial Completion.
 - B. Manufacturer shall warrant "Kynar 500" finish surfaces for 20 years.

2. PRODUCTS

2.1. MATERIALS

- A. Aluminum: Comply with reference standards; .050 edge trim and counter flashing – sandstone finish.
 - 1. Edge / fascia / counter flashing to be .050 aluminum ~50'± between expansion joints. Kynar 500 finish.
 - a. Material compatible with Roofing Manufacturer's requirements.
 - b. Material may be shop formed or METAL-ERA Anchor-Tite factory made.
 - c. No gutters on this job.
 - d. 10 ½" extended face may be required.
 - e. Color shall be Metal Era Sandstone (Express).
- B. Stainless Steel: Comply with reference standards.
- C. Copper: 16 oz. used where existing copper counter flashing will be retained and added to cover new termination bar. Finish will be natural. See drawings for location.
- D. Finishes - see Drawings.
 - 1. Aluminum: Kynar finish on gutters, downspouts, fascia, counterflashing and on pipe / conduit screen.
 - 2. Stainless Steel: Dull finish.
 - 3. Paint Lock: Paintable finish.
 - 4. Galvanized, pre-finished "Kynar" fluorocarbon finish.
- E. Screws, Bolts and Nuts: Stainless steel with sealhead washers where exposed to weather.
- F. Pop rivets must be aluminum for aluminum base metal. In all other locations, pop rivets to be stainless steel.
- G. Washers
 - 1. Same alloy as screw or bolt minimum .04 in. thick.
 - 2. Material same as adjacent screw head.
 - 3. All exposed washers shall be seal type: See Paragraph H, herefollowing.
- H. Reinforced Membrane Insulator: Apply as an isolator between dissimilar metals.
- I. Resilient Washers: Neoprene, minimum .062 in. thick. Must be factory adhered to washers (Item 2.1.E).

- J. Exposed galvanized steel: Shall be hot dip galvanized on box annealed steel. (H.D.G.)

3. EXECUTION

3.1. INSPECTION

- A. Thoroughly inspect all existing construction and the conditions under which the work will be performed. Report to the Architect/ Engineer IN WRITING all conditions that would adversely affect installation of the work.
- B. Start of work constitutes acceptance of the construction and conditions.

3.2. FABRICATION

- A. Metals: Comply with drawing reference.
- B. Verify dimensions at site prior to shop production fabrications.
- C. Form, fabricate and assemble all work in the shop to extent feasible and, if necessary, mark to ensure proper installation at the project site. Disassemble only to the extent necessary for shipment. ASSEMBLY MARKS SHALL BE APPLIED TO BLIND SIDE of the finished installation.
- D. Use the proper thickness of metal, adequate stiffeners, supports and proven details of assembly so that the finished product will conform to the highest standards of the industry. All clips shown on the Drawing are to be continuous. Segment cover caps are five inches (5") wide as detailed.
- E. Fabricate items with the minimum number of joints, using concealed fasteners wherever possible. Lap or lock joints but do not rivet or otherwise restrict relative movement of sections. SEE DETAIL NOTES FOR EXPANSION PROVISIONS. Gutters require covered expansion joints noted on plans.
- F. Limit all segments to fifty feet (50') in length. Minimum length ten feet (10'). Allow for minimum ½" expansion per segment length, unless otherwise specified. Assemblies require 5" cover at ½" expansion joint. Miter and lap two inches (2") min. and seal, or weld all internal or exterior corners and end caps. Some assemblies are required to be (lapped) installations, see Details.
- G. See the Drawings flashing details and configuration. Running flashing and trim metal splices shall be separated ½" for expansion and covered with .040 X 5" wide cap flashing set in double bead of sealant. Anchor screws shall pass in the ½" no-contact expansions space. Lock-splice caps in place securely. Finish sealant is to match metal finish color.
- H. All open ends of running flashing or counter flashing shall be neatly closed by fabrication of end cap running two inches (2") back under the running

flashing, sealant with sealant and appropriately mechanically secured in place. Flashing shall extend four inches (4") beyond perpendicular membrane and/or counter flashing. This includes extending around corners where encountered.

- I. Should cap lengths require more screws than shown on the Drawing to hold the splice cap close to the flashing, the same shall be furnished and installed by the Contractor in a uniform pattern throughout the job.

3.3. INSTALLATION

- A. Examine all surfaces to receive the metal flashing and trim.
 1. Verify all dimensions of existing and subsequent constructions.
 2. Installation of metal flashing and trim shall constitute acceptance of existing conditions.
 3. Coordinate work with Plumbing and Electrical Work.
- B. Erect all the members plumb, level and in line securely anchored and properly related to other parts of the work.
- C. Protect metal surfaces that are to be in contact with dissimilar metals. See 2.1.F.
- D. Coordinate flashing installation with work under Section 07900.
- E. All holes in sheet metal flashing anchored by screws exposed to temperature change and which is applied in segments in excess of 4'0" lengths shall be 3/16" diameter over size to accommodate expansion and contraction.
- F. Anchor holes in material segments shall commence and end on maximum of three inches (3") from the ends of the segment.

3.4. MECHANICAL FASTENERS - ACCESSORIES

- A. Stainless Steel Screw Manufacturers
 1. Fastenal Co., 2001 Theurer Blvd., Winona, MN 55987
 2. Dynamic Fastener Services, P.O. Box 231, 13902 Century Lane, Grandview, MO 64030.
 3. Guardian Fastener & Closure Systems, Telephone 800-633-GFCS.
 4. Sierra Fasteners, Inc., 1710 East Guthrie, Unit C, Des Moines, IA 50316.
 5. Fabco Fastening Systems, Townsend Div. of Textreon, Inc., West Newton, PA 15089.
 6. All screws shall be of alloy which will field test zero magnetic attraction.
 7. Install sealant in joint to be secured by screws prior to tightening.
- B. See Section 07530 for seal head screws.

C. Pop rivets

1. Install sealant in lap joints to be secured by pop rivets prior to installing rivets.
2. Lap joints to be pop riveted shall not be visible where possible.

3.5. ADJUST & CLEAN

- A. Upon completion of installations, carefully examine all work to confirm installation compliance and adequacy and correct all defective work.
- B. Clean up all rubbish, debris, surplus materials, packaging and tools and dispose of same off site in accordance with Federal, State and local regulations.

END 07600

DIVISION 7 – THERMAL & MOISTURE PROTECTION

Section 07900 – Sealants & Caulks

1. GENERAL

1.1. REQUIREMENTS INCLUDE

A. Base Bid – General Contractor

1. Contractor shall provide caulking and sealing of joints where required to complete this work.
2. Contractor to match color of metal (match color of new installed work, regardless of quantity).
3. See 2.1.A.2. for sealant as noted for color match to adjacent surface.
4. Contractor to remove caulk and backer rod from existing expansion joints on walls above the roof being done (not from roof to ground).
5. Where detailed to reuse existing copper counter flashing (modified) the caulk joint in the masonry shall be removed and new 100% silicon installed.

1.2. RELATED WORK

A. Specified elsewhere

1. 07530 – EPDM Elastomeric Membrane Roofing

1.3. HANDLING & STORAGE

- ###### A.
- When the Contractor chooses a product for a particular use for a sealant or caulk specified, that same product shall be used throughout the project for that specific assignment.

1.4. WARRANTY

- ###### A. Sealant Manufacturer:
- Contractor shall certify per Section 01740, as applicable.
1. Material performance - twenty (20) years against shrinkage and hardening - implied and advertised.
 2. Loss of bond to substrate as Manufacturer's implied and advertised.

2. PRODUCTS

2.1. MATERIALS

- ###### A. Exterior grade for masonry-to-masonry, metal-to-metal, wood-to-masonry, and glass-to-masonry.
1. Material's serviceable life expectancy shall be twenty (20) year minimum in Manufacturer's printed material for the applications proposed.

2. Approved products are as follows:

- a. Sonneborn NP-1
- b. Silaflex 1A
- c. G.E. Silicone Sealant (preferred)
- d. Dow 795

B. Interior grade caulk shall be one (1) part, paintable.

1. Chemical make-up shall permit 5% joint movement from 20 degrees F to 110 degrees F and shall be skinning type.

2. Approved products are as follows:

- a. DAP Latex Caulk
- b. Pecora BC 158
- c. Tremco Butyl Sealant

C. Grade on horizontal joints, exterior/interior grade sealant shall be one (1) part, self-leveling for concrete contraction/expansion joints.

1. Approved products are as follows:

- a. Sonneborn Sonolastic S.L.1
- b. Vulkem 45
- c. Dow Chemical 880

2.2. JOINT FILLER

A. Joint Filler F-3, closed-cell polyethylene approved products shall be as follows:

- 1. Ethafoam by Dow Chemical.
- 2. Expand-O-Foam by Williams Products, Inc.
- 3. Filler Foam FF-4 by Progress Unlimited, Inc.
- 4. Safe-T-Grip Filler Gasket by Structural Specialties Corp.

2.3. JOINT CLEANER. Joint cleaner shall be that cleaner recommended by Sealant Manufacturer for specific joint surface and conditions.

2.4. JOINT PRIMER AND SEALER. Joint primer and sealer shall be those compounds recommended by Sealant Manufacturer for the specific joint surface and conditions.

3. EXECUTION

3.1. PREPARATION

A. Examine all surfaces to receive the parts of the work specified herein. The application or installation of materials constitutes acceptance of the substrate.

- B. Clean surfaces and remove protective coatings that may fail in adhesion or interfere with bond of compound so surfaces are free of deleterious substances that might impair the work.
- C. Prime surfaces per the Sealant Manufacturer's instructions.
- D. Install bond breakers in locations and of type recommended by the Sealant Manufacturer to prevent bond or sealant to surfaces where such bond might impair the performance of the sealant.

3.2. INSTALLATION

- A. Install all materials in accordance with Manufacturer's printed instructions. Unless otherwise directed, conform as follows:
 - 1. Use backer rod and appropriate sealant for replacing expansion joints.
 - 2. Compounds shall not be installed at temperatures below 40 degrees F unless the Manufacturer specifically permits the application of his materials at a lower temperature.
 - 3. If job conditions require installation of compounds below the minimum installation temperatures recommended by the Manufacturer, consult the Manufacturer's Representative and establish the minimum provisions required to ensure the satisfactory work.
 - 4. Confine compounds to joint areas shown. Use masking tape to prevent staining of adjoining surfaces, spillage and/or migration of the compound out of joints. Tool surfaces to shape shown or, if none is shown, to a flush or slightly concave surface. Remove excess compound and clean adjoining surfaces as may be required to eliminate any indication of soiling or migration.
 - 5. In joints which are not subject to traffic, apply sealants to a minimum depth of 50% of the normal joint width but not less than 3/8" or more than 1/2" deep.
 - 6. Apply non-elastomeric compounds in exposed joints with the depth of compound not less than the joint width.
 - 7. Use appropriate sealants for all exterior joints and for the interior joints subject to movement, except traffic expansion and contraction joints. Use self-leveling sealant for all exterior and interior expansion traffic joints in concrete and tile work.
 - 8. Use appropriate caulk for all interior joints at locations to be painted not subject to movement in excess of 5%.
 - 9. Self-leveling sealant shall be poured over a bond breaker tape or F-3 Joint Filler. The joint shall be masked off adequately to assure a clean, flush and finished installation.
 - 10. Sealants and caulks shall be a color selected to blend with adjacent material color.
- B. Installations shall be neatly executed, smooth and regular in appearance, no lumps or globs or smears onto adjacent surfaces. Tool when appropriate.

3.3. SEALANT COLOR SELECTION

- A. Sealant shall match surrounds for color.
 - 1. Coordinate with Architect/Engineer regarding colors to insure approval.
 - 2. Once a Manufacturer's product has been established for a use, that same product shall be used throughout the project for the particular situation and background.

3.4. SEALANT APPLICATION

- A. For exterior/building envelope conditions: Select the proper sealant to provide resistance to air or water infiltration at all exterior envelope joints, connections of dissimilar materials:
 - 1. Wall expansion joints
 - 2. Door & windows
 - 3. Wall penetration
 - 4. Abutting dissimilar materials
 - 5. As needed to control infiltration

- B. Appearance conditions: Throughout the exterior of the construction provide sealants as needed to visually finish all installations.
 - 1. Wall expansion joints
 - 2. Construction joints
 - 3. Abutting dissimilar materials
 - 4. Wall, floor and ceiling penetrations
 - 5. Joints subject to water penetration
 - 6. Irregular joints
 - 7. Unintended gaps, cracks or openings, seal all holes from abandoned anchors or any item removed prior to and/or during construction.

END 07900

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid

1. General/Roofing Contractor shall provide remodel and extend existing sanitary roof vents to minimum twelve inches (12") above finished roof line where required.
2. The Contractor shall acquaint themselves with working conditions and requirements of the buildings for the material and labor required to complete the installation ready for use.
3. Clean out all roof drains, power rod-out all drain lines and flush to assure open and operating drains and drain lines. There are 15 roof drains in this contract.
4. Rehab each roof drain to like new condition and operation.

1.2. RELATED WORK

A. Specified Elsewhere:

1. 02072 – Minor Demolition for Remodeling
2. 07200 – Insulation
3. 07530 – EPDM Elastomeric Membrane Roofing

1.3. QUALITY ASSURANCE

A. Regulatory Requirements

1. Comply with Illinois Plumbing Code, 1999.
2. Illinois Steel Products Procurement Act, as amended (Illinois Revised Statutes, Ch. 48, Par. 1801 et. seq.).

1.4. DELIVERY, STORAGE AND HANDLING

- A. Materials shall be suitably packaged by manufacturer to prevent damage during shipment. Damaged materials will not be acceptable for use.
- B. Store materials on site in clean, dry, storage area; when outside, elevated above grade, enclosed with durable watertight wrapping.
- C. Handle all materials carefully to prevent damage. Minor scratches, marks or blemishes to finish shall be repaired to satisfaction of the Architect/Engineer.

1.5. INCIDENTAL CONSTRUCTION WORK

- A. The following construction work, incidental to installation of the plumbing system in the building, will be performed by the General/Roofing Contractor.

1. Remove lead safings on sanitary vent stack, remove and replace roof drain brackets, clamp rings, etc.
2. Wherein vent stacks are to be extended, provide neoprene stainless steel bonded couplings and Schedule 40 extension to 12" above the finished roof.
3. Notify NICOR prior to any gas service pipe work.

1.6. SUBMITTALS

- A. Submit catalog cuts on insulation to be used on ERU modification.

2. PRODUCTS

2.1. PIPING

- A. All sanitary vent pipe extensions shall be Schedule 40 PVC.

2.2. JOINTS IN WASTE AND VENT PIPING

- A. Joints in plastic, drain and vent piping shall be made in accord with the Illinois State Plumbing Code (1999).
- B. Joints, cast iron piping to PVC piping shall be made with neoprene seals, lubricated and installed as directed by manufacturer.

3. EXECUTION

3.1. INSTALLATION PERFORMANCE

- A. There is 326' (verify) of 4" gas pipe on the roof to be removed. Replace brick at North end (4" gas pipe inside has been removed), and cap the South end at the union.
- B. All vent stacks on roof of buildings shall be extended as detailed and called for on the Drawings.
 1. Extend to twelve inches (12") above finished roof surface.

3.2. CUTTING AND PATCHING

- A. Where existing sanitary vents are extended, remove safings.
- B. Carry out all cutting and patching work in a manner approved by the Architect/Engineer.
- C. See Section 01045 Cutting & Patching.

END 15400

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid

1. Provide assistance to remove and reset curb mounted fan units if necessary.
2. Provide assistance to raise kitchen air make up unit (N.I.C.).

1.2. RELATED WORK

A. Specified elsewhere

1. Section 01010 - Project Summary
2. Section 01040 – Field Engineering

1.3. QUALITY ASSURANCE

- A. All work installed to meet current NEC and ISBE requirements.

2. PRODUCTS

2.1. MANUFACTURERS

A. Wire Devices

1. Hubbell, Inc.
2. Leviton Manufacturing Co.
3. Pass & Seymore / Lagrand

2.2. MISCELLANEOUS PRODUCTS

- A. Any approved NEC device to complete the work.

2.3. MISCELLANEOUS ELECTRICAL WORK

- A. Any circuit that may need extended at existing exhaust fans that are required to be raised by reroof.

3. EXECUTION

3.1. INSTALLATION

- A. Tighten electrical connection to terminals according to Manufacturer's published torque values.
- B. Disconnect power to circuits to perform work. Check all equipment installed after power is re-energized.

END 16511

