

MIDDLETON ASSOCIATES INCORPORATED
1702 W. COLLEGE AVE., SUITE E
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SPECIFICATIONS FOR LABOR AND MATERIALS

FOR

OAKDALE ELEMENTARY SCHOOL LOBBY REMODEL FOR INCREASED SECURITY – PHASE 1
601 S. ADELAIDE, NORMAL, IL 61761

FOR

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

PROJECT NUMBER: 26062322A

ISSUE DATE: Thursday, May 5, 2022

PRE-BID MEETING: Thursday, May 12, 2022 – 3:00 p.m. Prevailing Time –
Oakdale Elementary School
601 S. Adelaide, Normal, IL 61761
Meet at Main entrance

BID DATE: Friday, May 20, 2022 – 1:00 p.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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Oakdale Elementary School Lobby Remodel for Increased Security –
Phase 1
601 S. Adelaide, Normal, IL
A/E Project No.: 26062322A

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. Kristen Weikle

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

ISSUE DATE: May 5, 2022

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DOCUMENT LIABILITY

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END 00020

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

This notice shall be published not less than ten (10) days prior to the Bid date.

Sealed proposals will be received by: McLean County Unit District No. 5 for Oakdale Elementary School Lobby Remodel for Increased Security, A/E Project No. 26062322A.

Time of Bid Submission: Friday, May 20, 2022 at 1:00 p.m. Bids will be opened 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 1:00 p.m. Proposals shall be clearly identified on the outside of the envelope as "Sealed Proposal" and must show the project title.

Terms of the proposal:

- Bid Security is required, 5% Bid Bond or Certified Check payable to McLean County Unit District No. 5.
- Owner protective bonds will be required in the amount of 100% of the Contract value after Board acceptance.
- Illinois Prevailing Wage Act P.A. 86-799 and HB 188 applies to this contract.
- 720 ILCS 5/ Illinois Criminal Code of 2012 is applicable to this project.
- The Board of Education has the right to reject or accept any or all parts of all bids submitted and to waive any irregularities in the bidding and to accept the bid considered in the best interest of the School District.

A Pre-Bid Meeting is scheduled for 3:00 p.m., Thursday, May 12 at Oakdale Elementary School. Meet at the main entrance. Attendance not mandatory.

Interested parties may check out Plans and Specifications at the Architect's office, Middleton Associates, Inc. There is a refundable deposit of \$25.00 per set, or download: www.middletonassociates.net, click on "Contractors."

END 00030

DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS

Section 00040 – Instructions for Bidders

1. GENERAL

1.1. LOCATION OF THE PROJECT:

- A. **Oakdale Elementary School, 601 S. Adelaide, 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, HIGH LEVEL FIT AND FINISH 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 replacement, and repairs; always allow for reasonable repair and maintenance access.

1.6. BIDDING REQUIREMENTS

- A. See Paragraph 1.20: Scheduling.
- B. 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 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 1.15 "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 OR 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.

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. Protective Bonds will not be required if bid is below \$100,000.00.
- B. Periodic Change Orders that may occur to the Contract shall be included in each respective bond.
- C. 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 (See Paragraph 1.14.A) 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: Construction must begin as soon as possible after contract signatures are completed. Work may begin no later than 8:00 a.m. June 1, 2022.**
 - a. Negotiations to begin construction before Bond & insurance certificates might occur.
- B. **The McLean County Unit School District No. 5 must occupy all spaces of the currently existing building of Oakdale Elementary School for the start of the 2022-2023 School Year on or before August 16, 2022.**
1. Summer school will occur during mornings and will require that the lobby is passable. Summer school will be completed by July 1, 2022.
- C. **Material for this construction project must be ordered ASAP after contract signatures are complete and Bonds and Insurance are completed.**
- D. 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 3:00 p.m., Thursday, May 12, 2022 at Oakdale Elementary School, 601 S. Adelaide, Normal, IL 61761. Meet at the Main Entrance.**
- 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 00301-1). The Architect will obtain the signature of the person designated by the Board of Education.
 - 2. The Architect will send two (2) Forms of Agreement, and the Contractor shall sign both, keep one (1) for their file, send one (1)

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, with consideration given to governmental requirements for COVID-19.
4. The Contractor shall immediately obtain Proof of Insurance, Labor and Materials, Payment and Performance Bonds (see Paragraph 1.14.A). 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. The orderly and rapid execution of the required work is of paramount importance.
- B. The work shall proceed with the exterior addition to be constructed and closed in prior to the present exterior wall being removed and work proceeding on renovation of interior spaces.
1. Moving the present Hat Pump to the new location must be done as soon as the existing exterior wall is removed.
- C. Contractors' Master Schedule
1. The Contractor shall prepare and maintain a Master Schedule, including the work of all sub contractors.
 2. Prior to preparation of the Master Schedule, all Subcontractors shall coordinate scheduling needs with the General Contractor.
 3. 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.
 4. **Contractor's Master Schedule shall be submitted by June 1, 2022.**
- D. Completion of the Contract
1. 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.

2. 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.
3. 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.

E. 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.
 1. Materials and equipment delivered on site or suitably stored with proof of insurance may be submitted for payment, subject to inspection.
 2. 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.

1.21. ALLOWANCE

- A. **The General Contractor shall include in his bid an allowance of \$5,000 for additional time and material for Change Order work as directed and approved IN WRITING by the Owner and A/E. \$5,000 to be added.**
1. This is primarily for unforeseen conditions that may arise during construction or for scope of work changes. Also see Section 01010, Paragraph 1.6.A.1.
 2. Unused portion of allowance will be returned to owner at time of Final Payment request via Change Order.
- 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 Director of Operations, Joe Adelman. 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. Note: See McLean County Unit School District #5 Board of Education meeting schedule at: <https://www.unit5.org/domain/79>. Pay Applications must be received in our office 8 business days prior to the Board Meetings to be processed at the Board Meeting.
- 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%. See 00800 Paragraph E.2.b.
 - 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 As-Built Drawings 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 renovations at other District Schools Elementary 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. 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 insures 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.

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. Only the fee is exempt.
2. Provide necessary permit related information to local city authorities.
3. Architect will provide Drawings and Specifications to Town of Normal Building Safety Dept.
4. 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. GENERAL

1.1. WORK INCLUDES

- A. All work included on the Drawings and Specifications for Project No. 26062322A – Oakdale Elementary School Lobby Remodel for Increased Security.
- B. Contractor submit bid on the following pages: 00300-2 and 00300-3.

1.2. **Add \$5,000 to Base Bid as an allowance for unforeseen conditions.**

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

00300 PROCUREMENT FORMS

Section 00300 -Proposal Form

Bid form may be copied, original signatures are required

PROJECT TITLE: McLean County Unit District No. 5, Oakdale Elementary School Lobby Remodel for Increased Security

DATE OF PROPOSAL: **Friday, May 20, 2022** TIME: **1:00 p.m. Prevailing**

LOCATION OF BID: McLean County Unit District No. 5 Warehouse
Attn: Joe Adelman
1999 Eagle Rd.
Normal, Illinois 61761

NAME OF FIRM: _____

PROPOSAL FOR: All work single contract

A/E PROJECT NO. 26062322A

THE BID ACKNOWLEDGES THE FOLLOWING ADDENDA (as applicable):
Failure to acknowledge may cause bid rejection

NO. 1 _____, NO. 2 _____, NO. 3 _____, NO. 4 _____, NO. 5 _____

EACH BID SHALL INCLUDE:

- A. The bid forms and certifications completed and signed, (*this form may be copied.*)
- B. Bid security (bid bond) (*standard industry forms may be employed*)
- C. BIDS SHALL INCLUDE **ALLOWANCE** – See 00040 (1.21 Allowance)

**BASE BID: McLean County Unit District No. 5
Oakdale Elementary School Lobby Remodel for Increased Security**

The bidder agrees to perform all base bid work, inclusive of all trades for the sum of:

_____ **Dollars**

BASE BID WRITTEN AMOUNT

\$ _____
Base Bid Numerical Amount

ALTERNATE BID(S) Alternates may be proposed for this work.

No. 1 ADD/DEDUCT \$ _____ from _____
No. 2 ADD/DEDUCT \$ _____ from _____

VOLUNTARY ALTERNATES OR SUBSTITUTIONS

Did you offer or include voluntary alternates or product substitution on form provided.

YES _____ **NO** _____

SEE PRODUCT SUBSTITUTION OR VOLUNTARY ALTERNATES FORM, ATTACH IF ANY ARE OFFERED. Voluntary alternates or substitutions may or may not be considered in making the award and are not required.

THE BIDDER AGREES TO:

1. Hold this bid open for twenty (10) calendar days after bid opening date.
2. Enter into and execute a contract with McLean County Unit District No. 5 if awarded this contract.
3. Comply with the contract and bidding documents with respect to bid security, all bonds, insurance, work requirements, schedule and Bonus / Penalty Clause
4. Comply with the Contract Documents with respect to scheduling as described in the documents, noted on drawings.

THE BIDDER MAKES THE FOLLOWING REPRESENTATIONS AND CERTIFICATIONS:

- A. A surety company has agreed to issue payment and performance bonds to fulfill the contracting requirements.
- B. The Bidder is not barred from contracting with any unit of state or local government as a result of violating the bid rigging or bid rotating provisions contained in 720 ILCS 5/33E.
- C. The Bidder is not barred from contracting with the State of Illinois as a result of a bribery conviction per 30 ILCS 505/10.2.
- D. All on site labor and wage compensation provided by this contractor or his subcontractors will comply with the Illinois Prevailing Wage Act (820 ILCS 130E).
- E. 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 McLean County Unit District #5 School Board, other officer or any person in the employment of McLean County School District No. 5 is directly or indirectly interested in the bid or any portion of the profit there from, except as allowed by the Illinois Law or the Illinois School Code.
- F. I agree to provide a drug-free workplace as required by the Illinois Drug-free Workplace Act.
- H. I 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.
- G. I certify that by submission of this proposal the bidder confirms that he is familiar with the site, existing conditions, the Bid Documents, requirements and the project schedule.

CONTRACTOR:

SIGNATURE:

Firm Name: _____

Title: _____

Address: _____

For Corporations Only

SUBCONTRACTOR: Proposed for work on this project.

Telephone: _____

HVAC: _____

FAX: _____

PLUMBING: _____

Email: _____

ELECTRICAL: _____

Date: _____

CONCRETE: _____

MASONRY: _____

END 00300

DIVISION 00 – PROCUREMENT REQUIREMENTS
Section 00301 – Award & Contract Form

OWNER - CONTRACTOR AGREEMENT

To be filled out upon award

Between:

The Owner: McLean County Unit District No. 5
1809 Hovey Ave.
Normal, IL 61761

And the General Contractor: _____

For the Project: **OAKDALE ELEMENTARY SCHOOL LOBBY REMODEL FOR INCREASED SECURITY FOR 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 26062322A and the Contractor's Bid Proposal dated May 20, 2022 which become the Contract for completion of the project as follows:

Base Bid Substantial Completion Date: **August 16, 2022. Work inside building will not be possible.**

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: May 25, 2022

Signatures:

Owner: McLean County Unit District No. 5

Contractor:

Contractor's Seal
(Corporation Only)

This Agreement must be signed and returned with the Contractor's Performance Labor and Materials Payment Bonds within fifteen (15) days of notice or the Contractor will be considered in default on acceptance of the award.

END 00301

00 4000 PROCUREMENT FORMS
Section 00307 - Voluntary Alternate and Substitution 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 subject to review after Contract award. Hold open for thirty-five (35) days from Bid Date.

SUBSTITUTIONS

MANUFACTURER'S NAME AND PRODUCT	ADD OR (DEDUCT)
_____	_____
_____	_____
_____	_____
_____	_____

VOLUNTARY ALTERNATE

DESCRIPTION	ADD OR (DEDUCT)
_____	_____
_____	_____
_____	_____
_____	_____

EVALUATION. Contract award will be made in accord with Instructions To Bidders. Only the lowest responsible bidder's Proposed Product Substitution Voluntary Alternates Form will be evaluated. Contract award will be established by adding the BASE BID plus any required alternates selected by the Board of Education.

Attach with herewith or submit on day of bid a general description of the proposed option being offered.

Provide detailed information promptly upon request.

END 00 4010

DIVISION 00 – PROCUREMENT REQUIREMENTS
Section 00800 – General and Supplementary Conditions

1. GENERAL

1.1. GENERAL CONDITIONS

- 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, 2007 Edition.
 - 1. Included in these Specifications by reference is AIA Document A201 General Conditions.
- B. AIA Document A201, 2007 Edition, can be purchased directly on line from a variety of vendors including the AIA and are available in electronic format as well as printed.
 - 1. AIA A201 2007 version can be reviewed at the Architects office without charge.
- C. To the page one of the AIA A201 General conditions Document:
 - 1. Project: Oakdale Elementary School Lobby Remodel for Increased Security.
 - 2. The Owner: McLean County Unit District No. 5, 1809 Hovey Ave., Normal, IL 61761
 - 3. The Architect: Middleton Associates Incorporated, 1702 W. College Ave., Suite E, Normal, IL 61761

1.2. SIGNING OF DOCUMENTS AND INSTRUMENTS OF THE CONTRACT

- 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."

2. SUPPLEMENTARY GENERAL CONDITIONS

2.1. SUPPLEMENTS TO AIA DOCUMENT A201 (2007 EDITION) THE GENERAL CONDITIONS OF THE CONTRACT.

- A. The following sections represent modifications or additions to the AIA A201 -2007 Document.
- B. TO ARTICLE 2/OWNER
 - 1. Add Subparagraph 2.2.2.1 Easements off site required by the Contractor to execute the work, such as space for storage, access, scaffolding, lane enclosure, etc., shall be arranged for by the Contractor and included in the contract amount.

C. TO ARTICLE 3 CONTRACTOR

1. To Subparagraph 3.3.1, delete the last two (2) sentences listed under 3.3.1 in their entirety.
2. To Subparagraph 3.3.1 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 have included in his proposal amount allowance to complete this work per a revised plan for which he can assume responsibility and shall notify the Owner and Architect before proceeding. In no case do the Owner and Architect take responsibility for directing Contractor Operations.
3. To Subparagraph 3.12
 - a. Add 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.
 - b. Add 3.12.6.2 Submittals reviewed by the A/E and returned or held as a record copy presume the Contractor responsibilities in paragraph 3.12.6 have been included whether noted or not.

D. TO ARTICLE 5 SUBCONTRACTORS

1. To Subparagraph 5.2
 - a. Add 5.2.5 The assignment of work or a portion of the work by the Contractor to Subcontractor(s) 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, including the work by said Subcontractor(s).

E. TO ARTICLE 7 CHANGES IN THE WORK

1. To Subparagraph 7.1.2
 - a. Add 7.1.2.1 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. Add 7.1.2.2 The Architect and Owner shall provide response to claims for additional cost within a reasonable time period upon receipt of notice or quote.
 - c. Add 7.1.2.3 Work for which an agreement cannot be reached prior to implementation can proceed as time and

material work with all parties to agree on what is additional work over that which should have been included to complete the work as originally intended.

2. To Subparagraph 7.2.2

- a. Add 7.2.2.1 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. Add 7.2.2.2 Overhead and profit may be charged proportional to this category of work on the Contractor's CSV or not to exceed the greater of:
 - 1) Fifteen percent (15%) for the Contractor's own work forces.
 - 2) Ten percent (10%) Subcontractor plus five percent (5%) Contractor, for fifteen percent (15%) total for work completed under a Subcontractor arrangement.
 - 3) These allowances shall include all off site and indirect costs, including insurance, project management, bonds and profit.

F. TO ARTICLE 9 PAYMENT AND COMPLETION

1. To Subparagraph 9.6.1

- a. Add 9.6.1.1 Wherein the Owner is governed by a public Board, payment requests must be received by the A/E 5 days prior to the established time for entering into agenda prior to the next regular Board Meeting. Payments will be made within twenty-five (25) days following Board approval. Failure to make agenda dates will result in a minimum one (1) month delay in payment.

G. TO ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

1. To Subparagraph 10.2.1

- a. Add 10.2.1.4 The Contractor shall be responsible to provide and maintain on site MSDS Sheets for all required materials to be brought on site.
 - 1) These sheets shall be readily available upon request to the owner on remodeling renovation projects which are Owner occupied.
 - 2) Comply with VOC regulations.
 - 3) Comply with IEPA regulations.

2. To Subparagraph 10.2.3
 - a. Add 10.2.3.1 Provide for the general safety of public and Owners employees, such safety provision shall be adjusted as appropriate to the age and volume of public anticipated in the project vicinity.
 - b. Add 10.2.3.1 Provide for traffic safety as appropriate to the operations; cooperate with the governing authorities on road activities, lane closures, excavations, surface cleaning etc.

H. TO ARTICLE 11 INSURANCE & BONDS

1. To Subparagraph 11.1.2
 - a. Add 11.1.2.1 Minimum Limits of Liability for preceding coverage are:
 - 1) Workers Compensation - Statutory Limit
 - 2) Applicable Federal (*such as Longshoreman's*) Statutory limits.
 - 3) Liability Insurance may be written as Comprehensive General Liability policy form or Commercial General Liability policy form with the following coverages:
 - a) Bodily Injury - \$1,000,000 each occurrence, \$2,000,000 aggregate
 - b) Property Damage - \$1,000,000 each occurrence, \$5,000,000 aggregate.
 - c) Property Damage – Broad Form - \$1,000,000 each occurrence, \$2,000,000 aggregate.
 - d) Personal injury (*with employment clause deleted*) \$1,000,000 aggregate.
 - e) Products and completed operations \$1,000,000 to be maintained one year following final completion.
 - f) Business Automobile Liability, (*including owned and non-owned and hired vehicles*)
 - g) Bodily Injury and Property damage \$1,000,000 each person, \$1,000,000 each occurrence.
 - 4) Umbrella Insurance \$10,000,000 over primary insurance limits.
 - 5) \$10,000 Retention for self insured hazards each occurrence
 - 6) 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.

2. To Subparagraph 11.1.4
 - a. Add 11.1.4.1 The Owner, Architect, and Consulting Engineers including their employees and representatives shall be included as Additional Insureds or Named Insureds on the insurance and shall be shown as such on the Certificate.
3. To Article 11
 - a. Add 11.1.5 Contractor's insurance shall be maintained in force through basic warranty and guarantee periods, not less than one (1) year following Final Completion.
4. To 11.3. Property Insurance
 - a. Add 11.3.1.1 The Owner's property and vandalism insurance has \$1,000 deductible. The Contractor shall insure and thus pay the costs not covered by the Owner's deductibles.
 - b. Add 11.3.1.2 The Owner's Builder's Risk will cover only normally included Owner risks, on site, Owner's interest only, excluding tools and property of the Contractor and improperly stored or unsecured materials.
5. To Paragraph 11.4.1 add the following Subparagraphs:
 - a. Add 11.4.1.1 The Contractor shall furnish Performance and Labor and Material Payment 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 and including labor obligations as interpreted by the Illinois Department of Labor and/or the courts.
 - b. Add 11.4.1.2 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 if applicable.
 - c. Add 11.4.1.3 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.

- d. Add 11.4.1.4 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.
- e. Add 11.4.1.5 The Contractor shall deliver the required bonds to the Owner not later than fifteen (15) days following the date the agreement is executed.

I. TO ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

1. To Subparagraph 12.2.2.1 After Substantial Completion:

- a. Add 12.2.2.1.1 Latent Defects, for a period of 10 years after Substantial Completion, upon demand by the Owner, the Contractor shall promptly repair or replace, including associated work repairs and cleanup necessary, defective or non-conforming work resulting from or constituting latent defects, fraud, fraudulent concealment or gross negligence.
- b. Add 12.2.2.1.2 Seasonal equipment such as temperature controls and building systems subject to seasonal loads such as heating equipment and air conditioning, shall be warranted to perform as intended for two years. Exception would be equipment damaged by incorrect operation or maintenance procedures, specifically covered in training, but improperly implemented by the Owner.

- a. Add 12.2.2.1.3 Prompt Repair. Upon notice from the Owner or Architect of 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 correcting or remedying such defects or non-conforming work. If the Contractor does not promptly pursue correction, the Owner may repair or replace such work and charge the cost 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.

- b. Add 12.2.2.1.4 The warranties set forth herein are in addition to all warranties or guarantees expressed or implied by operation of law, statute or ordinance.

2. To Subparagraph 12.2.2.3, Delete the word 'not'. Clarification; all materials and equipment are expected to perform satisfactorily for one year, items or equipment needing periodic attention during the first year of use, shall continue to be serviced by the Contractor until such time that the material, item or equipment is deemed to be doing its intended purpose without repeated service.

3. To Subparagraph 12.2.5
 - a. Add 12.2.5.1 Extended Warranties and Commercial Warranties. The Contractor shall deliver all commercial and extended warranties received from manufacturers to the A/E prior to Final Payment. Extended warranties and guarantees will be as described under the various trade work sections of these documents, and may be the responsibility of third parties to the contract such as dealers or manufacturer's from whom such extended coverage is specified or as advertised such as a commercial limited warranty of performance or service. Such extended warranties may or may not include labor unless specified, or in the case of commercially advertised warranties as offered by the party selling the product or equipment.
 - b. 12.2.5.2 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.

B. TO ARTICLE 13 MISCELLANEOUS PROVISIONS

1. To Subparagraph 13.1
 - a. Add 13.1.1 Location of the project is Illinois.
 - b. Add 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.

- c. Add 13.1.3 All 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).
 - d. Add 13.1.4 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.
 - e. Add 13.1.5 Illinois Department of Labor requirements. It shall be mandatory upon the Contractor to whom the Contract is awarded and upon any Subcontractors thereof to be in compliance with applicable wage and reporting regulations. This project is a Prevailing Wage Public Works contract.
2. To Subparagraph 13.3.
- a. Add 13.3.1 Notice served by facsimile (fax) to facsimile number used during bidding and construction shall be official written notice.
 - b. Add 13.3.2 Notice served by electronic means (email) to the electronic address used during bidding and construction shall be official written notice.
 - c. Add 13.3.3 The Bidder shall notify the Architect and/or the Owner at any time of changes in the facsimile or electronic contact addresses that will reach the contractor. Failure to so notify is the Contractors responsibility.

C. TO ARTICLE 15 CLAIMS AND DISPUTES

- 1. To Subparagraph 15.3.1 Delete the word 'SHALL' and Insert the word 'MAY'.
 - a. Add 15.3.1.1 Mediation may be employed to resolve disputes if agreed to by both parties to the Contract.
- 2. To Subparagraph 15.4.1 Delete the word Shall and insert the word 'MAY'.
 - a. Add 15.4.1.1 Arbitration may be employed to resolve disputes if agreed to by both parties to the Contract.

End 00800

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

1. GENERAL

1.1. SCHEDULE OF DRAWINGS – Oakdale Elementary School Lobby Remodel for Increased Security, PROJECT NO. 26062322A

<u>SHEET</u>	<u>TITLE</u>
G-1	COVER SHEET
A-1	PARTIAL FIRST FLOOR PLAN & DEMO PLAN
A-2	INTERIOR ELEVATIONS & WINDOW DETAILS
ME-1	MECHANICAL & ELECTRICAL PLANS

END 00860

DIVISION 1 – GENERAL REQUIREMENTS
Section 01010 – Project Summary

DIVISION 0 and DIVISION 1 are hereby made a part of each division and section of the project specifications as related items specified elsewhere.

1. GENERAL

1.1. REQUIREMENTS INCLUDE

- A. Base Bid – Oakdale Elementary School Lobby Remodel for Increased Security, Project No. 26062322A
 - 1. Remodel the present rooms Entry Area 4 to provide increased security and public convenience. Provide appropriate demolition. Provide remodeling of the present to form a new room, Reception 115. Provide minor remodeling of Room 115A.
 - 2. Provide a new addition Room 115 of approximately 230 sq. ft.

1.2. PRODUCTS FURNISHED BY OTHERS: All products, components, spaces, and equipment furnished by the Owner or by other Contractors are a part of this total project. so that work involving placing Classroom furnishings can be completed.

A. Contractor's Incidental Duties

- 1. Designate specific delivery date for each product in approved construction schedule. **After June 30, 2022, material must be stored in trailers on site.** A small trailer may be placed on the concrete entrance pad – not to obstruct entry and exit.
- 2. Promptly inspect delivered products, report damaged or defective items.
- 3. Handle at site, including unloading, uncrating, and storage.
- 4. Protect material from exposure to elements and damage.
- 5. Repair or replace items damaged as result of Contractor's operations.
- 6. Install, connect and finish products in system assembly ready to function, including incidental related work.

1.3. WORK SEQUENCE

- A. See Section 01031.
- B. Coordinate the work schedule with the Director of Operations, Joe Adelman, 309/275-8803.

1.4. CONTRACTOR USE OF PREMISES

- A. Confine operations at site to areas permitted by:
 - 1. Law
 - 2. Contract
 - 3. The Owner's Representative, per 1.3.B. above.

- 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, or components thereof, with weight that will endanger or damage structure.
- D. Assume full responsibility for protection and safekeeping of products stored on premises.
- E. Move and relocate as necessary all stored products or equipment that interferes with operations of the Owner.
- F. Obtain and pay for use of additional off site storage or work area needed for operations.
- G. Limited use of site for work and storage
 - 1. All vehicular on site activity shall have been prearranged and approved by the Owner.
- H. Cooperate with the Owner's use of the premises and other Contractors providing work on site under separate Contracts with the Owner.

1.5. CONTINUOUS OCCUPANCY BY OWNER

- A. Owner will occupy areas for general education during construction.
 - 1. There will be a Summer School program from June 1, 2022 to approximately July 2022. This program will be occupying a small part of the facility and will be dismissed each day at noon.
- B. Contractors shall provide
 - 1. Access by Owner's personnel and pupils when applicable.
 - 2. Operation of Mechanical and Electrical systems with a minimum of down time.
 - 3. Operation of exhaust systems with a minimum of down time.
 - 4. Adequate security of the premises in which work is in progress.
- C. Upon (after) the work being completed and accepted by Owner, the Owner shall provide:
 - 1. Custodial services
 - 2. Security
 - 3. General custodial maintenance

1.6. ASBESTOS

- A. 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 interrupted or become hazardous to the health of the Contractor, his employees, his subcontractors and their employees.

1. ACM is believed to be removed from the building; however, there may be underfloor transit ducts in the lobby. This system has been discontinued as an operable system since 2006. If this system interferes with the construction process, it will be treated as an unforeseen condition.
- B. The Contractor may deem it advisable to contact the Office of 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 eff. Dec. 9, 1985, amended by P.A. 84-1245, approved and eff. July 29, 1986, amended by P.A. 84-1346, and 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 an asbestos hazardous condition does exist in the path of execution of the work of his Contract, he shall so notify the Owner immediately.
 2. Pursuant to Item 1.6.B.1 above, the Owner (McLean County Unit District No. 5, Normal, IL) may implement the following action:
 - a. Eliminating that portion of the work by revision and change order to these documents.
 - b. Institute removal or acceptance encapsulation.
 3. Wherein concealed asbestos is discovered, the Contractor shall notify the Owner of the existence of said apparent asbestos which may require analysis for hazardous determination. This notification shall be IN WRITING at no cost to the Owner. Should analysis indicate that hazardous substance does prevail, the procedure shall be set forth under Item 1.6.B.2. above.

1.7. COORDINATION AND COOPERATION

- A. 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.A, and B to the disadvantage of the other.
- B. Should the bidding Contractor not understand the foregoing, he shall notify the Architect/Engineer for clarification prior to bidding in accordance with Section 00040, Paragraph 1.3., 1.4., and 1.15.
- C. This Contractor shall cooperate with other Contractors and their

Subcontractors working on site duly employed by the Owner to perform service related and unrelated to work outlined by these Documents.

1. Interior renovation work will be underway in other parts of this building. Contractor for that work is SCI General Contractors, phone 309/473-3926.

1.8. FITTING AND FINISHING THE WORK

- A. Contractor shall verify all field conditions, dimensions, elevations that relate to the work and properly accommodate these in the work as appropriate to the intended result within the Contract amount.
 1. In place construction, obstacles and site conditions and elements which can be seen and reasonably inferred.
 2. New construction, obstacles and conditions that can be seen or are to occur in the completion of the work.
 3. Allow to fit structural elements and all equipment as occur or will occur during the implementation of the Contract.
 4. Make adjustments as needed to fit and properly complete the work. This includes coordination of work by all trades.
- B. Contractor and his Subcontractors shall coordinate, accommodate, adjust and fit as appropriate all work to achieve the intended finished intent to normal commercial industry standards.
 1. Provide finishing elements, trim, sealants, scribes, receivers and accessories necessary and normal to the installations proposed and as recommended by manufacturers for proper use of products.
 2. All construction (all trades) to be weather and infiltration tight. Include appropriate weather seals, infiltration barriers, sealants, non-corrosive flashings and sealants to properly complete the intent of the project.

END 01010

DIVISION 1 - GENERAL REQUIREMENTS
Section 01030 - Alternates

1. GENERAL

1.1. DESCRIPTION

- A. The alternates are to provide the Owner with optional systems and comparative material prices for determining the most advantageous construction package.
- B. 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 which has been included in the Contract.
- C. All Base Bid requirements and material specifications not specifically mentioned or deleted by the alternate shall remain as originally set forth.
- D. All Contract Document requirements shall apply to alternates.
- E. Incidental Work: All necessary adjustment in the work shall be made to accommodate accepted alternates without cost change in and above the alternate cost.

1.2. ALTERNATE BIDS

- A. No Alternates at time of issue of this project.

END 01030

1. GENERAL

1.1. DESCRIPTION OF DRAWINGS AND LAYOUT

- A. Drawing data is intended to be reasonably accurate, however, strict accuracy in detail is not guaranteed. 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 and obtain 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, unless unforeseen conditions are discovered.

1.2. CONSTRUCTION OPERATIONS

- 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 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 the work and 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.

1.3. 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.

1.4. 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.

1.5. 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.

1.6. 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.

1.7. 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.

1.8. OPENINGS IN CONSTRUCTION

- A. Openings required for construction work shall be provided by the 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.

1.9. 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.
- 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.

1.10. 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.

1.11. 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.

1.12. 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.

1.13. 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.

1.14. 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.
- C. The Contractor shall paint specific components indicated in the contract documents.
 - 1. See drawing notes and these specifications Section 09900.

1.15. 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. REQUIREMENTS INCLUDE

- A. The Contractor shall coordinate work assigned under his Contract with the work of each and every other Contractor, Assigned Contractor and their Subcontractors as Contracted by the Owner to complete work related to the project or adjacent projects on the same site.
- B. The Contractor shall enforce predetermined on site lines of authority and communication and attend coordination meetings if required by:
 - 1. Contractor and Subcontractors
 - 2. Architect/Engineer
 - 3. Consultants
 - 4. Owner
 - 5. Town of Normal
 - 6. Regional Superintendent of Schools

1.2. RELATED WORK

- A. Specified elsewhere

- 1. DIVISION 0 – BIDDING & CONTRACT REQUIREMENTS

1.3. JOB CONDITIONS

- A. Construction Schedules – see Section 01310.
 - 1. Develop and maintain project schedules.
 - 2. Monitor schedules as work progresses.
 - 3. Identify potential variance between schedules and probable completion dates.
 - a. Report to Architect/Engineer adjustments in schedule to meet completion targets.
 - b. Provide summary reports of each monitoring.
 - c. Document all changes in schedule.
 - 4. Verify that product deliveries are adequate to maintain the project schedule.
 - 5. Report conditions that will adversely affect critical items on schedule to Architect/Engineer with recommendations for corrective action.
 - 6. Monitor operations that may cause damage to in place construction or equipment.
- B. Temporary Utilities
 - 1. Verify that adequate services are provided to comply with requirements of work and climatic conditions.

2. Verify proper operation and maintenance of temporary utility extensions.
 3. Administer traffic and parking controls.
- C. Payments: Coordinate and send monthly pay request to Architect/Engineer's office.
- D. Changes Requested
1. If the need arises, and the Architect and the Owner concur, submit change requests to the Architect/ Engineer with recommendation.
 2. Enforce adherence and coordinate all modifications in Contract Documents.
 3. Assist Architect/Engineer in negotiating proposals for change by furnishing complete and accurate cost of change breakdown.
- E. Permits and Fees
1. Obtain approvals from all authorities having jurisdiction.
 2. Permits shall be obtained, however, pursuant fees shall be waived except where a service is to be furnished by the government entity.
- F. Inspections by Contractor
1. Inspect work to assure that work is performed in accord with Contract requirements.
 2. Reject or stop portions of the work that are not in accord with Contract requirements.
- G. Interpretations of the Contract
1. Consult with Architect/Engineer to obtain interpretations.
 2. Assist in resolution of questions that may arise.
- H. Administer coordination and processing of shop drawings, product data, samples and maintenance brochures.
- I. The Contractor shall monitor his work, dispose of boxes and waste and keep the premises clean and safe during the progress of work and at completion of the Contract.
- J. Substantial Completion
1. Upon completion of any group of Classrooms, a Substantial Completion letter will be issued for that portion of the work.
 2. Upon Architect/Engineer's certification of date of the substantial completion, coordinate the correction and final completion of this work.

K. Final Completion

1. When Contractor determines work is complete, submit written notice to the Architect/Engineer that work is ready for final inspection.
2. Secure and transmit to the Architect/Engineer the required closeout submittals, including, but not limited to,
 - a. Final Waiver of Lien post-dated final pay request date.
 - b. Contractor's Affidavit declaring no financial obligation for materials and labor shall fall due pursuant to the project.
 - c. Submitting of a letter from the Bonding Company stating approval of final payment by the Owner to the Contractor.

1.4. CONTRACTOR'S PAYMENT PROCEDURE

- A. Payment to the Contractor will be made bi-monthly in accordance with the progress of the work and the terms of the Contract Documents.
- B. The amount of payment to be made will be determined by progress of the work and value of materials properly stored and shall be acceptable in the Architect/Engineer's opinion.
 1. A 10% retainage on the amount earned and/or materials stored shall be standard procedure.
 2. See Section 00040/1.19 "PROGRESS PAYMENTS" for exceptions to the 10% standard retainage.
- C. Prior to commencement of the work Contractor must comply with requirements of the Contract Documents and submit the following to the Architect/Engineer for approval:
 1. The Construction Schedule in bar-graph chart, including schedule of submittals for shop drawings and samples. See Section 01340.
 2. Schedule of project values in detailed breakdown format. See Section 01370.
 3. The Construction Schedule must be updated periodically throughout the duration of the construction phase. See Section 01310.
- D. Stored Materials: Approval of existence and approved storage procedures of on-site stored materials by the Architect/Engineer must be obtained by the Contractor prior to payment requests.
 1. All material stored off site must be clearly tagged and labeled as to the Owner, Project Name and the Project Number and must be available for inspection by the Architect/Engineer and/or the Owner's representative upon reasonable notice. The Contractor shall be responsible for security of on site stored materials and equipment.

2. When material is stored off site, pay application for same must be accompanied by a certificate of insurance for the material stored off site: materials, quantity, dollar value and location being named therein.
- E. Typed Submittals for Payment: Pursuant to progress payments, the Contractor shall prepare and assemble for submittal to the Architect/Engineer, typed copies of the payment request materials which consist of the following:
1. Application and Certificate for Payment/AIA Form G702A in two (2) copies.
 2. Contractor's Waivers of Lien for current request and Waivers of Lien from Subcontractors and from Material Suppliers for previous pay request in two copies.
 3. Contractor's Affidavit and Sworn Statement (2 copies).
 4. Stored Material List (2 copies)
 5. See 00040/1.24 Schedule of Submittals
- F. Contractor's Lien Waivers
1. Partial Lien Waivers
 - a. With second payment request and each succeeding request, the Contractor shall submit to the Architect/Engineer partial lien waivers from himself, each Subcontractor and each Supplier showing that the amount paid to date to each is at least equivalent to the amount billed and paid the previous request.
 - b. Lien waivers shall accompany the first payment request, if payment amount exceeds 50% of the total Contract or subcontract sum.
 2. Final Lien Waivers - The Contractor's final pay request shall include:
 - a. The full amount of his Contract, including all change orders thereto.
 - b. Final lien waivers from all Subcontractors and all Suppliers for which final lien waivers have not previously been submitted.
 3. See also Section 01700 - PROJECT CLOSEOUT.

1.5. ARCHITECT/ENGINEER – PAY REQUEST REVIEW

- A. The Contractor shall carefully review all of the material to be transmitted to the Architect for accuracy and completeness. Failure to include all items, or errors in any item, may cause a delay in payment until all the deficiencies and errors are rectified.
- B. Upon receipt of the Contractor's application, the Architect/ Engineer shall review the submittals for completeness against the on site progress and stored materials list before forwarding payment request to the Owner.

END 01041

DIVISION 1 – GENERAL REQUIREMENTS
Section 01045 - Cutting & Patching

1. GENERAL

1.1. WORK INCLUDED

- A. Execute cutting, 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 work not conforming to Contract requirements.
 - 4. Remove existing construction as needed.
 - a. Where cabinets are removed to install new heat pumps, the Owner will replace exposed un-tiled floor.
 - 5. Install specified work in existing construction.
 - a. Provide appropriate transition to existing material.
 - 6. 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 structural elements.
- D. 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.
- E. 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. RELATED WORK

- A. Specified elsewhere
 - 1. Section 01120 – Remodeling Project Procedures

2. 02072 – Minor Demolition for Remodeling
3. 05400 – Cold Formed Metal Framing

1.3. SUBMITTALS

- A. Prior to cutting which affects structural safety to building 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.

1.4. 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.
- C. Unforeseen conditions when exposed may be considered as an extra expense and if so will be paid by Owner.

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 that 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.

END 01045

DIVISION 1 – GENERAL REQUIREMENTS
Section 01051 - Grades, Lines & Levels

1. GENERAL

1.1. WORK INCLUDES

- A. The Contractor will lay out the work within the building and on the site.
- B. The Contractor will establish all working lines, levels, elevations and measurements.
- C. Each Contractor shall lay out his own work, including lines, levels, grades, slopes and shall coordinate with other trades.

1.2. RELATED WORK

- A. Specified elsewhere
 - 1. DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
 - 2. DIVISION 1 - GENERAL REQUIREMENTS

1.3. QUALITY ASSURANCE

- A. Layout Personnel
 - 1. Layout personnel shall be experienced in layout work of similar complexity.

1.4. SUBMITTALS: See Section 01340 Submittals.

1.5. CONTRACTOR RESPONSIBILITIES

- A. Each Contractor shall
 - 1. Lay out construction work for his trade area.
 - 2. Establish all working lines, levels, elevations and measurements for the work.
 - 3. Employ qualified personnel to perform the work.
- B. Each Contractor shall provide qualified personnel to perform layout work for specific system and equipment installations, as necessary.
- C. Each Contractor shall contact all utilities to spot locate all applicable utilities and verify the correctness of the locations indicated on the Drawings.
 - 1. The toll-free telephone number for the Joint Utilities Location Information for Excavators (J.U.L.I.E.) is 800/892-0123.
 - 2. Call other utilities, if information is not provided by this source, i.e., water department, street department, telecable, etc.

1.6. ARCHITECT/ENGINEER RESPONSIBILITIES

A. The Architect/Engineer shall furnish

1. General data and instruction.
 - a. Improvements as applicable.
2. Information as to available service and utility lines, both public and private.
 - a. Branch distribution on site lines are not all recorded and therefore the location and depth of some are not known.
3. General work location from fixed points not affected by the Construction.
4. Benchmark location and elevation where applicable.

END 01051

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.
- 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) NOT BE INSTALLED ABOVE GROUND FLOOR LEVEL.

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.
- D. The Contractor shall replace, rework, or reinforce or otherwise correct the fastenings that 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 PVC 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. Metal framing: self-tapping flat head or pan head screws.
 - 4. Steel: thru bolts, pneumatic driven fasteners, where detailed or where prior approval is made.
 - 5. Sheet metal: sheet metal screws, thru bolts.
 - 6. Masonry: embedded anchor bolts, pneumatic driven fasteners where approved, metallic expansion anchors, metallic wedge anchors, or toggle bolts.
 - 7. Concrete: embedded anchor bolts, pneumatic driven fasteners where approved, metallic expansion anchors, or metallic wedge anchors.

2.4. SPECIAL ANCHORAGE & FASTENERS

- A. Self Tapping Cap Screw - Pre-Tap Drill. See Section 07600/2.2.
 - 1. CF #14 X required length, "B" carbon structural tap seal screws.
 - 2. Counter bore wood to receive head and washer to flush.

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 Illinois State Board of Education.
- 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
IBC	International Building Code
IBR	Institute of Boiler and Radiator Manufacturers
IMC	International Mechanical Code
MCA	Mechanical Contractors Association
NBFU	National Bureau of Fire Underwriters

NEC National Electric Code

NEMA National Electric Manufacturers' Association

NEPA 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

State of Illinois Part 185, Part 175 and Part 180 Health Life Safety Code

State & Federal Accessibility Regulation

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

END 01060

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 demolition, remodeling and renovation work to expedite completion.
3. In addition to demolition specified in Sections 02072, 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 or temporarily supporting conduit and wiring.
 - b. Removal of unsuitable or extraneous materials and non-functioning components not marked for salvage, such as abandoned electrical and mechanical components.
 - c. Cleaning of surfaces. Remove surface finishes to install new work and finishes.
4. Patch, repair and refinish existing items to remain, to the specified condition for each material, with a neat transition to adjacent new construction.
 - a. Insure that remodeling work is done before painting.

1.2. RELATED REQUIREMENTS

A. Specified elsewhere

1. 01010 - Project Summary
2. 01045 - Cutting & Patching
3. 01510 - Temporary Utilities
4. 01540 - Security
5. 01561 - Construction Cleaning
6. 02072 - Minor Demolition for Remodeling
7. DIVISION 23 – Heating, Ventilation, and Air Conditioning (HVAC)
8. DIVISION 26 – Electrical

1.3. SEQUENCE AND SCHEDULES: Schedule work in sequences within times specified in 00040 and 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, blocking, soffit, fascia 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 that is scheduled to remain.
- E. Protect existing and new work from weather and temperature extremes. Provide weather protection, waterproofing, heat and humidity control to prevent damage to remaining existing work and to new work.

1.5. EXISTING CONDITIONS

- A. Asbestos containing materials (ACM) are assumed to be limited to any 9" X 9" floor tile found in some rooms. Plaster ceilings have been tested and found to be free of ACM.

2. PRODUCTS

2.1. SALVAGED MATERIALS

- A. The Owner
 - 1. Will remove items of value to the District.
- B. The Contractor shall
 - 1. Do not use salvaged or used material in project for in-place construction except as indicated on the Drawings.

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. All installations and reinstallations shall be operational ready and in

conformance with all facets of Federal and State regulations governing Illinois schools.

3. EXECUTION

3.1. REMOVE EXISTING CONSTRUCTION

A. Temporary Removals.

1. When called for on the drawings, remove and reinstall equipment or finish material to allow the installation of the specified system or material.

B. Remove and dispose of waste and by-products of the construction project.

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. UTILITIES

A. Take all reasonable precautions against damage to utilities.

B. The Contractor shall confirm locations of all existing utilities in the work areas before commencing any of his work.

C. Verification should be made with electrical, telephone, cable, water, sewer, gas, and any other utility normally servicing the area. Before commencing any excavation call the Joint Utilities Location Information for Excavators (J.U.L.I.E.) toll free number 1-800-892-0123; call the City Sanitary Department; call the Cable Service Company; and call the City Street Department, all as applicable.

D. Whenever inadvertent damage or breaks occur in an existing gas, water, sewer, steam conduit, telephone, electrical main or service, the Contractor responsible shall immediately notify proper officials of utility interruptions.

E. The Contractor shall render all possible assistance in restoring the services cut by him and shall assume all costs, charges or claims connected with the interruptions and repair of the same.

3.4. DAMAGED SURFACES

A. Patch and replace all portions of the existing finished surfaces found to be damaged, lifted, discolored or showing rot and 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. Notify Architect as soon as such condition is discovered.

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.

END 01120

DIVISION 1 - GENERAL REQUIREMENTS
Section 01310 - Construction Schedules

1. GENERAL

1.1. REQUIREMENTS

A. Work Includes:

1. Submittals of project construction schedules for work within seven (7) business days after Notice of Award.

1.2. RELATED WORK

A. Specified elsewhere

1. 01010 - Summary of Work
2. 01041 - Project Coordination
3. 01340 - Submittals
4. 01370 - Schedule of Values

1.3. JOB CONDITIONS

A. The orderly and rapid execution of the required work is of paramount importance.

1.4. SUBMITTALS

A. 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.

2. PRODUCTS (N/A)

3. EXECUTION

3.1. PROJECT PROGRESS

- A. Submit initial schedules within seven (7) business days after date of Notice of Award.
 - 1. Architect/Engineer will review schedules and return the reviewed copy within two (2) business days. Allow time for shipping and handling both ways.
 - 2. If required, resubmit within five (5) business days after return of the reviewed copy with corrections or a letter explaining why changes cannot be implemented.
 - 3. Submit number of copies required by Contractor, plus two (2) copies to be retained by Architect/Engineer. If additional copies are required, furnish same at no additional cost.

- B. Updating monthly by indicating:
 - 1. Progress of each activity since previous submission.
 - 2. Projected completion dates for all activities.
 - 3. Activities modified since previous submission.

- C. Adjust work and material schedules to meet time deadlines.

END 01310

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. Shop Drawings will not be required on field fabricated material.
 - b. Submit four (4) copies minimum unless notes otherwise in a particular section.
 - c. Architect and/or Owner will retain two (2) copies.
 - d. Contractor will receive remaining copies for his use.
 - e. 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. 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, if requested by the owner, within thirty-one (31) business days of Notice of Award, submit in accord with 00040/1.17.

C. IDENTIFICATION OF SUBMITTALS

1. The Contractor shall clearly mark each submittal of the Shop Drawings, Catalog Cuts, Pamphlet, or Specification Sheet for identification and record, for example:
 - a. DATE: As submitted
 - b. BUILDING: Project Name
 - c. LOCATION: City
 - d. TYPE OF EQUIPMENT: (Example - Heating/Ventilating)
 - e. UNIT: (Example - #1)
 - f. SUBMITTED BY: Contractor's Name
2. Data shall also indicate model number selected for furnishing and indicate capacities or conditions of operation.
 - a. Catalog data of general advertising nature, without specific outline or rating for equipment, will be rejected.
 - b. Marked product manufacturer's catalogs and engineering data shall accompany the submittal.

D. AS-BUILT DRAWINGS AND OPERATION MANUALS

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.
2. The Contractor shall submit three (3) copies of bound equipment Operation Manuals.
 - a. 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. 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.
 - a. Architect/Engineer review of a submittal shall not relieve the Contractor of specification compliance unless same is specifically brought to the attention of the Architect and/or Owner IN A LETTER FORM attached to the submittal data and subsequently approved by the Architect/Engineer IN WRITING.

- b. 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.

END 01340

1. GENERAL

1.1. DESCRIPTION

A. Related work specified elsewhere:

1. 01010 - Summary of Work
2. 01041 - Project Coordination
3. 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 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 cost and material cost (separate line).
 - 2. Each Subcontractor labor and material cost (separate line).
 - 3. Each major Supplier of products or equipment.

- C. 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 four (4) 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 Representatives shall have access to the work at all times.

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. Toilets in the buildings may be used by contractor's work force providing that these rooms be kept reasonably clean.

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.

1.3. DESCRIPTION OF UTILITY SYSTEMS

A. Electrical system:

1. Power is supplied to the site by Ameren IP.
2. The Contractor is advised to contact Ameren IP 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 (verify with Owner).

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

DIVISION 1 – GENERAL REQUIREMENTS

Section 01530 - Barriers

1. GENERAL

1.1. WORK INCLUDES

A. The Contractor shall:

1. Provide and maintain suitable metal fabric type barrier to keep unauthorized personnel away from construction operations from construction operations.
2. Remove when no longer needed, at completion of work or as directed to facilitate the Owner's regular use of this building and site.
3. Contractor shall replace any and all damage to buildings and grounds including plantings, walks, drives, trees, sod, and utilities and lights to pre-construction or better condition.
4. The Contractor shall handle demolition and new materials in a safe manner limiting and controlling the spread of debris and dust. Removed material shall not be dropped free fall in the open air.
5. Do not leave construction aids, where accessible to passers-by or intruders in place overnight unattended.

1.2. RELATED REQUIREMENTS

A. Specified elsewhere

1. 01010 - Project Summary

2. PRODUCTS

2.1. MATERIALS

- A. Temporary barrier materials may be new or used, suitable for purpose.
- B. Do not violate specified codes.

3. EXECUTION

3.1. INSTALLATION

- A. Install to a neat and uniform appearance, structurally adequate for purposes.
- B. Maintain barriers during entire construction period.
 1. Remove when site grading is done – reinstall after.
- C. Relocate barriers as construction progresses.

1. Barrier to remain in position shown on site plan when construction is finished.

3.2. 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.

3.3. UTILITIES

- A. Take all reasonable precautions against damage to utilities.
- B. The Contractor shall confirm locations of all existing utilities in the work areas before commencing any of his work.
- C. Verification should be made with electrical, telephone, cable, water, sewer, gas, and any other utility normally servicing the area. Before commencing any excavation call the Joint Utilities Location Information for Excavators (J.U.L.I.E.) toll free number 1-800-892-0123; call the City Sanitary Department; call the Telecable Service Company; and call the City Street Department, all as applicable.
- D. Whenever inadvertent damage or breaks occur in an existing gas, water, sewer, steam conduit, telephone, electrical main or service, the Contractor responsible shall immediately notify proper officials of utility interruptions.
 1. Apparently, the existing high pressure gas line is under the 1967 addition as shown and should not be an issue in this project. The Architect has discussed the location of the pipe with NICOR. Call J.U.L.I.E.
- E. The Contractor shall render all possible assistance in restoring the services cut by him and shall assume all costs, charges or claims connected with the interruptions and repair of the same.

3.4. 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. WORK INCLUDES

- A. The Contractor shall
 - 1. Protect work, stored materials and construction equipment from theft and vandalism.
 - 2. Protect work area (Room 115) 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.
- 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
 - 2. 01530 - Barriers

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

1. GENERAL

1.1. REQUIREMENTS INCLUDE

A. Base Bid:

1. The exterior windows in Room 115A shall be carefully protected to be reused as dividing wall between 115A and 115. This glass wall will be removed to the nearest aluminum mullion and a door frame and door (less than 3' in width) will be installed.

1.2. RELATED WORK

A. Specified elsewhere

1. 01010 - Project Summary

1.3. EXISTING CONDITIONS

- A. This project involves demolition of existing finishing materials. No structural demolition is required.
- B. The Owner will move existing movable furnishings away from work areas (outside classroom / office glazed walls).

2. PRODUCTS

2.1. MATERIALS

- A. All damaged material shall be repaired or replaced with new materials of the same quality as the existing materials and installation when they were new.

3. EXECUTION

3.1. PREPARATION

- A. Protect all floor, wall and ceiling finishes in work area.

3.2. PERFORMANCE OF THE WORK

- A. Immediately remove demolished and waste materials from work area and clean debris so it does not spread into adjacent areas.
- B. Remove or protect materials to be reinstalled or retained in manner to prevent damage.
- C. Do not burn or bury materials on site.

END 02072

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid:

1. General Contractor shall provide:

- a. Metal stud wall framing, with anchorage and bracing.
- b. As detailed.

1.1. RELATED WORK

A. Specified elsewhere:

- 1. 09 21 16 - Gypsum Wallboard

1.2. SYSTEM DESCRIPTION

A. Performance Requirements

- 1. Specification for the Design of Cold-Formed Steel Structural Members, 1968, with Addendum No. 1 and 2, American Iron and Steel Institute.
- 2. Cold-Formed Steel Design Manual, 1977 Edition, American Iron and Steel Institute.

1.3. QUALITY ASSURANCE

A. Qualifications of Erector:

- 1. Minimum of three (3) years successful experience on comparable cold-formed metal framing projects.
- 2. Welders qualified in accordance with AWS D.1.

B. Regulatory Requirements: Erect cold-formed metal framing to meet requirements of IBC 2016.

1.4. REFERENCES

- A. ASTM A446, Grade D, minimum yield 50,000 psi - Structural Steel.
- B. AWS D1.1 - Structural Welding Code.
- C. SDI Standard #1 - Steel Deck Institute.
- D. ASTM A1003 G-40 – Non Structural products protective coating.
- E. ASTM A1103 G-60 – Structural products protective coating.

1.5. DELIVERY, STORAGE & HANDLING

- A. Deliver products to site in accord with Standard Documents for Construction.
- B. Store products on site in accord with Standard Documents for Construction.

2. PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- A. Clark Cincinnati-Inc., Cincinnati, OH 45246 513/874-9631, 800/543-7140
- B. Dale Industries Inc., Dearborn, MI 48128 313/846-9400, 800/882-7883
- C. Unimast Inc., Franklin Park, IL 60131 708/451-1410, 800/323-0746
- D. Dietrich Industries Inc., Pittsburgh, PA 15219 412/281-2805, 800/873-2443
- E. Or equal
- F. Steel Stud Manufacturer's Association Members without prior approval.

2.2. MATERIALS

A. Steel Framing

- 1. Studs, Formed galvanized sheet steel, typical:
 - a. See Details or Plan Notes for appropriate selection.
 - b. 250S162-33 (2½ " X 1- 5/8" X 20-gauge
 - c. 362S162-33 (3½ " X 1-5/8" X 20-gauge
 - d. 400S162-33 (4" X 1-5/8" X 20-gauge
 - e. Other sizes and gauges may be detailed but never less than 33 (20-gauge).
 - f. Clips and accessories as associated.
 - g. Lobby Rm 120 walls
 - 1) Studs: STX 3625125-33 3-5/8" @ 16" O.C.
 - 2) Track head and sill (Not above glazing) TRXA 362T100-33
- 2. Studs, Interior Wall: typical 362S162-33, depth to provide total wall thickness shown in conjunction with finish surfaces or cladding indicated.
 - a. Other sizes may be noted on the Plans and Details.
- 3. Track: Formed galvanized steel; channel shaped; same width as studs, for tight fit; 20-gauge solid web.
 - a. Some Details note deep track such as the window head replacement at the exterior window replacement work.
- 4. Furring (hat) channel – 24-gauge X size as appropriate to allow space for electrical boxes at furred walls.

- ii. Accessories
 - 1. Bracing, Furring, Bridging: Formed galvanized sheet steel; channel and strip shaped as indicated or as appropriate to conditions.
 - 2. Plates, Gussets, Clips: Galvanized formed steel, thickness determined for conditions encountered as detailed, use manufacturer's standard shapes when available.
- C. Fastenings
 - 1. Self-drilling, self-tapping screws, bolts, nuts and washers: hot-dipped galvanized: ASTM A90-69.
 - 2. Anchorage Devices: Power driven or powder actuated, drilled expansion bolts; screws with sleeves or tapcons.
 - 3. Welding: AWS D1.1.
- D. Finishes
 - 1. Galvanizing: ASTM A90-69, 1.25 oz./sq. ft.
 - 2. Primer: Zinc chromate touch-up for galvanized surfaces.

2.3. FABRICATION

- A. Form members to manufacturer's standard shapes meeting design criteria.
- B. Cut right angle connections of framing components to fit squarely against abutting members. There shall be no gaps in structural walls.
- C. Connect members together by self-drilling #8 pan head screws--four (4) screws per connection in structural walls.
- D. Galva-Prime non-galvanized steel to 1.5 mil minimum dry film thickness.
- E. Field fabrication of complex parts.
 - 1. Box beams – make up (2) track (2) c studs 20 gauge unless noted otherwise.

3. EXECUTION

3.1. ERECTION

- A. Align floor and ceiling tracks, locating to wall layout. Secure in place with screws or welding at maximum 16 inches o.c.
 - 1. Sixteen inches (16") o.c. maximum non-structural
- B. Place studs at sixteen inches (16") o.c. and not more than two inches (2") from abutting walls and at each side of openings. Connect studs to tracks using clips and ties, screws, or welding, in accordance with manufacturer's recommendations. Check manufacturer's recommendations for structural stud for mezzanine and follow.

- C. Construct corners using minimum three (3) studs. Double studs at door, window and sidelight jambs. Install intermediate studs above and below openings to match wall stud spacing.
- D. Provide deflection allowance below supported horizontal building framing in ceiling or head track for non-load bearing framing.
- E. Attach cross studs or furring channels to studs for attachment of fixtures behind lavatory basins, toilet and bathroom accessories, grab bars and other items anchored to partitions or walls.
- F. Install additional framing between studs for attachment of:
 - 1. Electrical boxes and other mechanical and electrical items
 - 2. Door bumper stops
 - 3. Hardware
 - 4. Wall supported equipment and accessories
- G. Erect load bearing studs one piece full length. Splicing and wire tying of framing components is not permitted. Join members forming trusses by welding.
- H. Erect load bearing studs, brace, and reinforce to develop full strength to meet design requirements.
- I. Set floor or ceiling joists parallel and level, with end bearing, lateral bracing, and bridging in accordance with manufacturer's recommendations.
- J. Extend stud framing to ceiling only. Attach ceiling channel to ceiling framing securely.
- K. Make provision for erection stresses. Provide temporary alignment and bracing. Touch-up field welds and scratched or damaged galvanizing.
- L. Ensure framing provides true and flat surfaces, ready to receive gypsum board finish.

END 05 400

1. GENERAL

1.1. WORK INCLUDED

- A. The General Contractor shall provide hollow metal doors, frames, sidelights and vision panel frames as shown on the Drawings and specified herein.
1. One new steel door and frame between Rooms 115A and 115.
 2. New aluminum door for Lobby to 115.

1.2. RELATED WORK

- A. Specified elsewhere:
1. DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
 2. DIVISION 1 - GENERAL REQUIREMENTS
 3. 01055 - Anchorage & Fasteners
 4. 07900 - Sealants & Caulks
 5. 08700 - Door Hardware
 6. 09900 - Painting

1.3. SUBMITTALS

- A. Submit shop drawings in accord with 01340. Show type of door and frame for each opening, full scale sections of all typical members, dimensioned elevations, anchors, reinforcements, and other required components.

1.4. HANDLING AND STORAGE

- A. Handle and store doors and frames at the job site in such a manner as to prevent damage. Wrappings or coverings shall be removed upon arrival of doors at the job site.
- B. Doors shall be stored in a vertical position of blocking, clear of floor with blocking between the doors to permit air circulation between the doors. All damaged or otherwise unsuitable doors and frames, when so ascertained, shall be replaced.

2. PRODUCTS

2.1. MATERIALS

- A. Structural Steel Shapes: ASTM A36-70a.
- B. Sheet Steel: ASTM A 366-72, commercial quality, cold rolled, stretcher leveled.
- C. Galvanized Steel ASTM A 366-72 .5 oz/square foot per side.

- D. Primer: Phosphate treated, gray zinc chromate baked on inside and outside of all sections.

2.2. MANUFACTURERS

- A. Acceptable manufacturers of standard 16-gauge doors and frames:
 - 1. Steelcraft - Cincinnati, Ohio
 - 2. The Ceco Corporation - Chicago, Illinois
 - 3. Mesker Door Co., Inc., Huntsville, AL
 - 4. Fenestra Corporation - Erie, Pennsylvania
 - 5. Curries Co., Mason City, IA
 - 6. Amweld Building Products, Garrettsville, OH

2.3. FABRICATION

- A. Fabricate hollow metal doors and frames as shown on the Drawings and in accordance with best shop practices. Frames shall be welded rigid, neat in appearance, and free from defects. Field measurements shall be taken as required for coordination with adjoining work.
- B. Form exposed surfaces free from warp, wave and buckle, with all corners square, unless otherwise shown. Set each member in proper alignment and relationship to other members with all surfaces straight and in a true plane.
- C. Reinforce members and joints with steel plates, bars, rods or angles for rigidity and strength.
- D. Conceal all fastenings unless otherwise shown or specified.
- E. Provide combination type hollow metal door frames to be used as both door buck and trim, formed to profiles.
- F. Unless otherwise shown, fabricate all interior frames of 14 gauge steel primed steel.
- G. All corners shall be welded and ground smooth exhibiting a neat smooth flush finish.
 - 1. Provide proper returns at all edges.
- H. Doors and frames shall be mortised and reinforced for hardware in accordance with the Hardware Manufacturer's instructions and templates. Reinforcing shall be drilled and tapped to receive hinges, locks, strikes, and closers. Cover boxes shall be provided for hardware cutouts. The hinge reinforcements shall be 7-gauge. Angle floor clips have two holes each for 3/8" anchor.

- I. Make provisions for installing rubber door mutes on interior door frames. Three (3) for single frames.
- J. Provide internal reinforcement for surface mounted hardware in frames to match locations shown or specified for doors.
- K. Furnish at least three (3) adjustable metal anchors in each jamb of shapes, sizes and spacing shown or required for anchorage into adjoining wall construction. Fabricate joint anchor of steel no lighter than gauge used for the frame, unless otherwise shown.
- L. Floor anchor clips for each jamb shall be not less than 14-gauge steel with two anchor holes and welded to frame. Terminate bottom of frames at the indicated finished concrete floor level.
- M. Miter, fit, weld, and grind smooth corners of panel moldings for glass panels to form continuous frames around panels. Furnish removable moldings of minimum 18-gauge steel. Secure removable moldings with not less than No. 6 x 32 Phillips, oval-head countersunk machine screws at 12" o.c.
- N. Doors shall be as follows:
 - 1. 1-3/4" thick.
 - 2. 14-gauge face sheets.
 - 3. 14-gauge edge channels.
 - 4. 1/8" beveled lock side.
 - 5. S.D.I. Type III extra heavy-duty seamless full flush.
 - 6. Foam filled core on exterior doors.
 - 7. Cut out mortise and reinforce for hardware mounting.
 - 8. 7-gauge drilled and tapped hardware.
 - 9. Fully galvanized and primed back and face side.
- O. Frames shall be as follows:
 - 1. Section shall be PR-15 with 1/2" X 5/16" return adjacent to wall anchorage, welded construction.
 - 2. Stops 5/8" deep X 1-15/16" door pocket X 2" casing face at side jambs and 4" casing face at door head jambs.
 - 3. Loose stops for glazed frames shall be 1/2" thick X 1-1/4" wide - screw anchored to frames.
 - 4. Frames shall be 14 gauge.
- P. Top and bottom edges all doors shall be closed with a continuous recessed channel not less than 16-gauge, extending full width of door and spot welded to both faces. Both vertical edges of doors shall be leveled 1/8" in 2".
- Q. Provide clearances for hollow metal doors of 3/32" at jambs and heads, 1/8" at meeting stiles for pairs of doors and 3/8" at bottom where no threshold is required. 3/8" to increase 1/4" where door swings over carpet.

Where a threshold is shown, provide 1/8" in 2".

- R. In addition to other requirements for hollow metal doors and frames specified herein, comply with the label requirements of the National Fire Protection Association and applicable local codes. Fabricate doors and frames in accordance with the requirements of the NFPA Standard No. 30 and UL Standard for Safety No. 60 for the class of door opening shown or scheduled.
- S. Provide accessories for doors per the Drawings and per Section 08700.

2.4. SHOP PAINTING

- A. Thoroughly clean all metal surfaces of loose scale, shavings, filings, dirt and other deleterious materials by using wire brushes or other effective means. Remove grease and oil by solvent cleaning.
- B. Chemically treat all surfaces with phosphate compound to assure maximum paint adherence. Apply one coat of primer, baked on. Cover all surfaces without runs, smears or bare spots. THOROUGHLY PRIME JAMBS INSIDE AND OUTSIDE.
- C. Prime coat inside surfaces of frames.
- D. Prime coat inside surface of all removable stops, as well as the frame area covered by such stops.

3. EXECUTION

3.1. PREPARATION

- A. Examine job site conditions to receive the work. Installation shall confirm acceptance of job site conditions and preparation.
- B. Verify all dimensions of in place and subsequent construction.

3.2. INSTALLATION

- A. All items shall be set in their correct locations as shown on details and shall be level, square, plumb and at the proper elevations and in alignment with other work.
- B. All interior and exterior joints between glass, framing and mullion members shall be tightly sealed with elastomeric sealant in order to assure a vibration free and watertight installation.
- C. All materials shall be screwed in place using backing, masonry plugs or anchor straps as applicable.
- D. Where moldings are joined, they shall be accurately cut and fitted to result

in a tightly closed joint.

- E. After erection, protect exposed portions of framing from damage by grinding and polishing machines, plaster, lime, acid, cement or other harmful compounds.
- F. All doors and frames to be factory primed and receive two (2) coats satin DTM latex paint in field.

END 08100

DIVISION 8 – DOORS & WINDOWS

Section 08400 – Aluminum Frames, Aluminum Door, & Hardware

1. GENERAL

1.1. WORK INCLUDED

A. General Contractor shall provide one aluminum door and frame for interior.

1. ADA compliant hardware.
2. Push/Pull with stile lock.

1.2. RELATED WORK

A. Specified in other Sections:

1. DIVISION 1 - GENERAL REQUIREMENTS
2. 01055 - Anchorage & Fasteners
3. 07900 - Sealants & Caulks

1.3. QUALITY ASSURANCE

A. Reinforce the doors and frames to receive hardware components. In particular, reinforce the door and frame for closers and stops. Show reinforcing on the shop drawings.

1.4. SUBMITTALS

A. Provide Data: For each type of door and frame indicated, include door designation, type, level and model, material description, core description, construction details and finishes.

B. Submit the following in accordance with Section 01340:

1. Manufacturer's Literature: Materials description and installation instructions for system used.
2. Shop Drawings: Complete layout of frame and door elevations, framing details, reinforcing peripheral conditions, and anchorage.
3. Complete description of hardware and parts list for future maintenance.

1.5. WARRANTY

A. Warranty period: Ten years starting on date of shipment. In addition, a limited lifetime (while the door is in its specified application in its original installation) warranty covering: failure of corner joinery, core deterioration, delamination or bubbling of door skin.

2. PRODUCTS

2.1. MANUFACTURERS. Use all one manufacturer.

- A. Special-Lite, Inc., Decatur, MI, 800-821-6530
- B. Kawneer Flush line, Franklin, IN, 317/738-2600
- C. Or approved equal – obtain approval before bidding.
 - 1. Or provide price increase or deduct on Substitution / Voluntary Alternate Form.

2.2. FINISH

- A. Natural anodized
- B. ADA hardware to match

2.3. APPLICABLE DOOR TYPES

- A. Door locations are shown on drawings.
- B. Single aluminum door is Kawneer 350 medium stile entrance 36" x 86". Verify all dimensions. Door is for Lobby 4 to Room 115A.
 - 1. Infill – ¼ glazing meet Federal standards.
 - 2. No weather stripping required.
- C. Clearances: Not more than 1/8 inch (3.2 mm) at jambs and heads, except not more than ¼ inch (6.4 mm) between pairs of doors. Not more than ¾ inch (19 mm) at bottom, with standard being 5/8 inch (15.9 mm) at bottom.
- D. Door Edges: Lock stile to be factory beveled 1/8" in 2" for rub free operation. Square lock-edge will not be accepted.
- E. Tolerances: Maximum diagonal distortion – 1/16 inch (1.6 mm) measured with straight edge, corner-to-corner.
- F. Hardware Reinforcement: Fabricate all hardware reinforcements utilizing premium high density polyethylene (HDPE) and fiberglass blocking. Any form of wood or metal reinforcements will not be accepted.
- G. Exposed Fasteners: Unless otherwise indicated, provide stainless steel, countersunk flat or oval heads for exposed screws and bolts.
- H. Thermal-Rated (insulating) Assemblies: At exterior locations and elsewhere shown or scheduled, provide doors fabricated as thermal-insulating door and frame assemblies, with an "R" value of 11-12.
- I. Hardware Preparations: Prepare doors and frames to receive mortised and concealed hardware according to final door hardware schedule and templates provided by hardware supplier. Doors and frames must be factory pre-drilled for all mortised hardware preps. Pilot and through-bolt holes for all surface mounted hardware to be drilled at the project site during installation.

2.4. FRAMING SYSTEMS

A. Kawneer 451.

1. .125" Thick mill finish extruded aluminum for three doors.
2. Necessary clips, stops and framing components to complete the framing system.
3. Sealants and closure pieces.

B. Accessory trim pieces: Provide necessary closure pieces on extruded aluminum to properly finish jambs and head.

C. Basic Systems - 4-1/2" X 2" X 3/16" wall thickness aluminum.

D. All designated openings to receive new aluminum frame.

1. Tri-Fab 450 or equal
2. 2" X 4 1/2" X 3/16" (0.187")
 - a. With all closure trim pieces, clips, stops, framing and anchoring components to complete the door frames.

2.5. HARDWARE (PROVIDED BY HARDWARE SUPPLIER **NOT** DOOR MANUFACTURER)

A. Keying:

1. Exterior doors equipped with Von Duprin Panic Device and Primus Lock to match Unit 5 master.

B. Product Application:

1. One single door Room 4 (Lobby) door 7'-2" high to room 115.
 - a. 350 medium stile.
 - b. Kawneer push/pull with key outside and thumb turn inside. Keying Schlage Primus.
 - c. Closer with hold open.
 - d. No threshold.

C. Continuous geared hinges – on new door for Room 4 to room 115.

1. Select Products, Ltd. SL-11 Full Mortise
2. Pemko Hinge V
3. Hagar Roton

D. Closer – FRP door and aluminum door

1. LCN Smoothie, 4116 AVB aluminum finish, S-CNS arm
2. Hold-open

E. Louvers – No louvers in aluminum entrance doors.

2.6. VISION LITES

- A. Factory Glazing: 1-inch glass meeting Level 1 security glazing.
- B. Lites in Exterior Doors: Allow for thermal expansion. Provide laminate or tempered glazing.
- C. Rectangular Lites:
 - 1. Size: 24" by 32": two lights located in top half of and bottom half (As indicated on Drawings – sill 51" above floor)..
 - 2. Factory glazed with screw-applied aluminum stops anodized to match perimeter door rails.
- D. Factory glazing ¼" glass 3 ½" stiles; 3 ½" head; 10 ½" bottom and 8" horizontal midsection.

3. EXECUTION

3.1. INSTALLATION

- A. Examine all surfaces to receive parts of the work specified herein. Verify all dimensions of in-place and subsequent construction. Installation of frames constitutes acceptance of the existing conditions.
 - 1. Doors with new Primus locks and lever latch set installed.
- B. All items shall be set as shown and shall be level, square, plumb, at proper elevations, and in alignment with other work.
- C. All joints shall be tightly sealed with elastomeric sealant in order to secure a watertight job and eliminate air leakage as much as possible. All materials shall be screwed in place using backing, masonry plugs or anchor straps as required.
 - 1. Plastic anchors in masonry shall not be used. See Section 01055.
 - 2. Jamb and heads (for glazing frames or door frames) shall be anchored as follows:
 - a. 1/4" diameter cap screws at maximum 1'-4" o.c.
 - b. 5/16" diameter cap screws at maximum 2'-0" o.c.
 - c. 3/8" diameter cap screws at maximum 2'-0" o.c.
 - d. Minimum three (3) anchors per jamb segment.
 - e. First and last segment anchors shall not exceed 8" spacing from the end.
 - f. Anchor for 15 psf wind load, leeward/windward.
- D. Where moldings are joined, they shall be accurately cut and fitted to result in a tightly closed watertight joint.
- E. General: Install doors, frame and accessories according to Shop Drawings, manufacturer's data and as specified.

- F. Placing Frames: Set frames accurately in position, plumbed, aligned and braced securely until permanent anchors are set. After wall construction is completed remove temporary braces and spreaders, leaving surfaces smooth and undamaged.

3.2. ADJUSTING AND CLEANING

- A. Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.
- B. Cleaning: Clean fiberglass door and frame assemblies in accordance with manufacturer's recommended procedure.

END 08400

1. GENERAL

1.1. WORK INCLUDED

- A. There are five (5) windows on this job – all windows are fixed and field framed and glazed. Overall dimension 2' x 4' -4" with lower sill 2'-10" AFF.

1.2. DELIVERY, STORAGE AND HANDLING

- A. All materials shall be carefully handled upon removal at the project site. Do not stack directly on floor, provide cardboard shims, stack or store in a manner to avoid abrasion, warping or winding of the assembly. Keep covered.

2. PRODUCTS

2.1. MATERIALS

- A. Aluminum window systems shall be fabricated from Kawneer or equal structural aluminum stock and glazed on site.
- B. Hardware: Description of existing windows:
1. Weatherstripping shall be Schlegel Q-Lon or equal.
 2. Glass and Glazing shall be one inch (1") level 1 ballistic.
 3. Sealants, interior and exterior, shall be a one (1) part polyurethane color to be selected. Use rope where appropriate to conditions.
 4. These five (5) windows are to be installed in metal stud walls with 5/8" impact resistant gypsum board both sides..

2.2. FABRICATION

- A. General Description of new windows:
1. Units shall be shop or on-site fabricated with mechanical fasteners.
 2. Depth of frame and sash shall not be less than 2-3/8".
- B. Frame
1. Frame components shall be Kawneer or equal.
- C. Glazing
1. All shop glazed units shall be wet glazed level 1 ballistic with a silicone backbed compound (to be BE SCS-2511 or equal).

3. EXECUTION

3.1. INSPECTION

A. Job Conditions

1. Verify dimensions clean tolerances, plumb and level. Provide a solid anchoring surface.

3.2. INSTALLATION

A. Use only skilled tradesmen with work done in accord with approved shop drawings and specifications.

B. Plumb and align window faces in a single plane for each wall plane and erect windows and materials square and true adequately anchored to maintain position permanently when subjected to normal thermal and building movement.

3.3. ADJUSTING AND CLEANING

A. After completion of window installation, windows shall be inspected, adjusted, put into working order and left clean, free of labels, dirt, etc. Protection from this point shall be responsibility of General Contractor.

END 08500

DIVISION 8 – DOORS & WINDOWS
Section 08700 – Door Hardware

1. GENERAL

1.1. WORK INCLUDED

- A. General Contractor shall provide adequate and suitable hardware and accessories at all doors shown on the Drawings.
 - 1. Hardware for steel doors, new Room 115 to existing Room 115A.

1.2. PRODUCTS FURNISHED IN THIS CONTRACT BUT NOT SPECIFIED UNDER THIS SECTION

- A. Hollow Metal Work - 08100: Hardware Supplier shall furnish steel door, frame templates for frame preparation to Door Fabricators.
- B. Aluminum Doors & Frames -- Doors and hardware specified in Section 08400.

1.3. RELATED WORK

- A. Specified in other Sections:
 - 1. DIVISION 1 - GENERAL REQUIREMENTS
 - 2. 08100 - Hollow Metal Work
 - 3. 08400 - FRP Doors & Frames

1.4. REFERENCES

- A. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People
- B. NFPA 80 - Fire Doors and Windows
- C. AWI - Architectural Woodwork Institute - Quality Standards
- D. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures
- E. NFPA 252 - Fire Tests of Door Assemblies.
- F. UL 10B - Fire Tests of Door Assemblies
- G. UL 305 - Panic Hardware
- H. Illinois School Code 175/185/180

1.5. SUBMITTALS

- A. Submit the following in accordance with 01340:

1. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
2. Shop Drawings: Indicate locations and mounting heights of each type of hardware.

B. Submit manufacturer's parts lists and templates to Door Frames Fabricator.

1.6. OPERATION AND MAINTENANCE DATA

A. Submit under provisions of 01700 maintenance manuals showing parts and service procedures for all items of operable hardware.

B. Maintenance Data: Included data on operating hardware lubrication requirements, and inspection procedures related to preventative maintenance.

1.7. QUALITY ASSURANCE

A. Perform work in accordance with the following requirements:

1. Installer shall be experienced in the installation and adjustment of selected hardware.
2. Follow manufacturer's instructions.
3. Adjust to operate smoothly, quietly and without binding.
4. Damaged, scratched or incomplete hardware devices shall not be used.

B. Certification: Proof of hardware inspection shall be provided to the Owner and Architect/Engineer. See 3.3 of this section.

1.8. QUALIFICATIONS

A. Manufacturers: Company specializing in manufacturing the products specified in this section.

B. Hardware Supplier: Firm specializing in supplying institutional door hardware at least three (3) years and approved by the manufacturer.

1.9. REGULATORY REQUIREMENTS

A. Conform to Illinois Code #175, 185m 180, and NFPA as applicable for requirements applicable to fire rated doors and frames.

1.10. DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products per provisions of 01600. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.

B. The Supplier shall deliver the keys directly to the Owner. The General Contractor and the Architect/Engineer shall be furnished an acknowledgment receipt bearing the Owner signature.

1.11. WARRANTY

- A. 100% Labor and Materials - one (1) year warranty to Owner under provisions of 01740. Warranty shall cover latch sets and door closures.
- B. Extended Warranty: Parts, replacement, rebuilding, shop labor - excludes field labor to install.
 - 1. Latch/locksets - five (5) years
 - 2. Exit devices - five (5) years
 - 3. Closers - five (5) years

1.12. MAINTENANCE MATERIALS

- A. Provide maintenance materials under provisions of 01730.
- B. Provide and deliver to Owner two (2) sets of special wrenches and tools applicable to each different or special hardware component.

2. PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- A. Hinges:
 - 1. Interior Application:
 - a. Hager BB1279, 4-1/2" x 4-1/2" US32D or US26D.
 - b. Lawrence BB4101, 4-1/2" x 4-1/2" US32D or US26D.
 - c. Stanley FB179, 4-1/2" x 4-1/2" US32D or US26D.
- B. Latchsets/Locksets: 2-3/4" backset, dead-locking spring bolts where keyed.
 - 1. Extra heavy-duty commercial grade, ANSI A156.2, Series 4000, Grade 1.
 - 2. Schlage D Series D53PD x US32D or US26D.
 - a. 5-3/4" lever radius x Rhodes trim with 2-9/16" diameter rose.
- C. Push-Pulls: N.I.C.
 - 1. Hiawatha Pull #535A 8", or equal, US32D or US26D. Mount pull in 3-1/2" x 16" x .1" thick push plates x US32D or US26D.
 - 2. Redstone Pull #178A (1" x 2-1/2" x 10") x US32D or US26D. Mount pull in 3-1/2" x 16" x .1" thick push plate x US32D or US26D.
 - 3. Hiawatha, or equal, push plates (kick plate stock) 10" x 24" x 18 gauge US32D.
 - 4. Russwin Pull #481, 9-1/4" x US32D or US26D.
- D. Cylinder Locks: Exterior areas to be keyed to Owner's Primus Schlage system to provide building keying coordinated with existing, master keying,

match existing, grand master keying and individual keying as directed in conference with Owner prior to delivery, see 2.2.A.

1. Interior locks shall be "C" Core.

E. Closers:

1. Normal closers, fully adjustable and applicable accessories with no hold open where specifically noted in Schedule, thumb (hand) turn operated hold-open all other locations. Adjustable delay action at all closers.
 - a. LCN 4100 Series

F. Door Stops (Use wall stops wherever possible.):

1. Wall Stops (mounted to mate pull, handle or knob device):
 - a. Hiawatha: R1326 ½ BL x US28D or US26D.
 - b. Ives: #401 x US 28D or US26D.
 - c. Glynn Johnson: #WB50MX x US28D or US26D.
 - d. Rockwood 400/403.
2. Floor Stops (add spaces as applicable to door undercut)
 - a. Hiawatha: #1330A and #1330AE x AL or US32D finish.
 - b. Yale: #846RP and 847RP x US26D or US28D finish.
 - c. Russwin: #207, #207 ½ and #209 x AL or US26D.
 - d. Ives: #436 or #438 x AL or US26D.

2.2. KEYING

- A. Door Locks: New cylinders keyed differently, keyed alike, master keyed, and grand master keyed. Match existing building keying and master keying as directed by Owner.

- a. Schalage "C" cores for interior

- B. All cylinders shall be keyed and master keyed compatible with the existing building hardware system. Supply keys in the following quantities:

1. Four (4) sets of individual cylinder keys.
2. Two (2) master keys.
3. Zero (0) grand master keys.
4. For keying questions call Kaine Hilt: 309/275-7418

2.3. FINISHES. Finishes are brushed steel/pewter color.

3. EXECUTION

3.1. EXAMINATION

- A. Verify site conditions under provisions of 00800.
- B. Verify that doors and frames are ready to receive work and dimensions are in accord with documents, shop drawings and manufacturer's instructions, as applicable.
- C. The Specifications and Drawings indicate hardware intent.
 - 1. Door hardware omitted from the Schedule shall be fitted with hardware in accord with a similar door installation at no additional cost to the Owner.

3.2. INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions.
- B. Use templates provided by hardware item manufacturer.
- C. Mounting heights for hardware from finished floor to center line of hardware item:
 - 1. Locksets: 40"
 - 2. Push/Pull: 40"
 - 3. Dead Locks: 40"
 - 4. Exit Devices: 40"

- 3.3. FIELD QUALITY CONTROL. Hardware Consultant shall inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.4. ADJUSTING

- A. Adjust hardware for smooth operation.

3.5. PROTECTION OF FINISHED WORK

- A. Protect finished work under provisions of 01600.

3.6. SCHEDULE OF HARDWARE SETS

- A. Set A – this applies to entrance door to 117. Door 2 on plan.
 - 1. 1½ pair hinges
 - 2. Corridor latch set (F109)
 - 3. Closer with no hold-open
 - 4. Wall stop
 - 5. Doors:

- a. 3'-0" x 7'-0" 14 ga.
 - b. Vision Glass 7" x 24"
 - c. Heavy Duty Louver 8"h x 24" w
- B. Set B – this applies to Door to Restroom 117.1. Door 3 on plan.
1. 1½ pair hinges
 2. Privacy latch (F76) ND 105
 3. Closer with no holds pen
 4. Door:
 - a. 3'-0" x 7'-0" 14 ga.
 - b. No Vision Glass
 - c. Push button lock
 - d. Heavy Duty Louvers 8"h x 18" w
- C. Set C applies to Door 1 on plan – see Section 08400 Aluminum Frames, FRP Doors, & Hardware.
1. Continuous Hinges
 2. 24" x 24" glazing panel
 3. Latch set F109.
 4. Closer no hold open
 5. Aluminum
- D. See Section 08400 for Aluminum doors.

END 08700

1. GENERAL

1.1. DESCRIPTION

A. Work Included:

1. Contractor shall provide glass and glazing as shown on the Drawings and specified herein.
 - a. Existing wire glazing to remain. Provide new corridor/lobby glazing.
 - b. Provide level 1 ballistic glass in Lobby 4 door.

1.2. RELATED WORK

A. Specified elsewhere

1. DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS
2. DIVISION 1 - GENERAL REQUIREMENTS
3. 08100 - Hollow Metal Work
4. 08400 - Aluminum Doors & Frames
5. 08700 - Door Hardware

1.3. QUALITY ASSURANCE

- A. Glass shall conform to Federal Specifications DD-G-451-C.
- B. Unless otherwise shown, conform to details and procedures of the "Glazing Manual" (Flat Glass Marketing Association).
- C. All glazing materials shall comply with State and Federal recommendations and the Illinois School Building Code.
 1. School CODE requires some interior building glazing to be wire glass unless otherwise designated specifically. Where wireglass is required in Code 175 and 185, we are specifying Firelite glazing.
- D. Comply with glass manufacturer's recommendations for annealed, heat treated or tempered depending on exposure conditions, edge shading, sun, etc.

2. PRODUCTS

2.1. MATERIALS

- A. Float or Plate Glass: PPG Industries, Libby-Owens-Ford Company, or ASG Industries, Inc.), Mid-American Glass, Inc., Davenport, IA. Thickness as shown on the drawings; tempered or laminated in doors and adjacent lights and where shown. Annealed heat strengthened or tempered as recommended by manufacturer solar/shade/thermal conditions.

- B. Recycle existing wire glazing in corridor/office to form new Lobby 120 walls. Use Kawneer Inframe material to support glazing. See page after Section 3.3.
- C. Glazing compound, glazing tape, sealant, primary seal, secondary seal, spacers, etc.: All elements used in the factory and in the field shall be approved by the glazing Manufacturer as compatible.
- D. Laminated glass to meet ASTM C 1036-85 and ANSI 297.1-1984 and Consumer Product Safety Commission 16 CFR 1201, 1/4" minimum total thickness, 015" interlayer up to nine (9) square feet, .030" interlayer over 9 square feet.
- E. Insulated glass: Where called for shall be assembled of the required or noted glazing materials and thicknesses, ten (10) year manufacturer's guarantee against loss of seal and/or clouding.
 - 1. For all windows, use two (2) 1/4" grey low 'e' third surface units separated by 1/2" sealed air space.
 - 2. Use this product with tempered glass as required in north, east and west corridors.
 - 3. Use annealed, heat strengthened, or tempered as recommended by the insulated glass manufacturer for applications as occur for solar/shade/thermal stress irregularities.
 - 4. Always assume irregular shading pattern glazing due to seasonal sun incidence variation and possible future landscaping shadows.

3. EXECUTION

3.1. PREPARATION

- A. Examine all surfaces to receive the parts of the work specified herein. Verify all dimensions of in-place and subsequent construction. Application or installation of materials shall constitute acceptance of the related construction.

3.2. INSTALLATION

- A. Employ only experienced glazers who have had previous experience with the materials and systems being applied. Use the tools and equipment recommended by the Glass Manufacturer.
- B. Measure all openings and cut glass accurately to fit each opening. Provide a minimum edge clearance and bite on the glass as specified by FGMA. Tempered glass and wire glass shall not be seamed, nipped or abraded at the job site.
- C. Maintain a minimum temperature of 40 degrees F during glazing unless the Manufacturer of glazing materials specifically agrees to application of his materials at lower temperatures.

- D. Clean glazing stops and rabbets to receive glazing materials of all obstructions and deleterious substances that might impair the work. Remove protective coatings that might fail in adhesion or interfere with bond of sealants. Comply with the Manufacturer's instructions for final wiping of surfaces immediately before application of primer and glazing compounds or tapes. Wipe metal surfaces with approved cleaning solvent.
- E. Prime surfaces to receive glazing compounds in accordance with the Manufacturer's recommendations, using recommended primers.
- F. Inspect each piece of glass immediately before installation. Do not install pieces with significant impact damage at edges, scratches, or abrasion of faces, or any other evidence of damage.
- G. Locate setting blocks at the quarter points of sill but no closer than 6" to corner of glass. Use blocks of proper size to support the glass in accordance with Manufacturer's recommendations.
- H. Provide spacers for all glass to separate glass from stops, except where continuous gaskets or tape are required. Locate spacers 36" o.c. maximum inside and out, with a minimum of two (2) spacers per edge of glass. Provide thickness equal to the sealant or compound thickness shown. Provide width, as required for minimum of 3/8" bite on glass, at all four edges.
- I. Set glass in a manner that produces greatest possible degree of uniformity in appearance. Face all glass, which has dissimilar faces, with matching faces in the same direction. Set all glass with bow (if any) to exterior.
- J. Glazing materials from different sources shall not be used in the same joint system unless the Manufacturer of each material has stated IN WRITING that his material is fully compatible with the other material.
- K. Use masking tape or other suitable protection to limit coverage of glazing materials to the surfaces intended for sealants.
- L. Butt or lap ends of sealant tape in accordance with Manufacturer's recommendations.
- M. Tool exposed surfaces of glazing materials to provide a slight wash away from the glass. Install exposed tapes and gaskets with a slight protrusion above stops in the final compressed condition.
- N. Clean excess sealant or compound from glass and framing members immediately after application, using solvents or cleaners recommended by Manufacturers.
- O. Provide glass as follows:
 - 1. All interior glazing, comply with Safety Glazing Act, except as noted on plans, 1/4" diamond pattern wire glass in fire doors.
 - 2. Fire rated interior glazing sidelights and borrowed lights greater

- than 100 square inches to be ninety (90) minute fire rated glass.
- 3. Exterior doors, laminated, insulated gray glass.

3.3. CURING, PROTECTION & CLEANING

- A. Cure sealants in accordance with the Manufacturer's instructions to attain maximum durability and adhesions to glass and framing as soon as possible.
- B. Protect glass from breakage immediately upon installation. Use streamers or ribbons suitably attached to framing and held free of the glass. Warning markings shall not be applied directly to the glass.
- C. Remove and replace glass which is broken, cracked, chipped or damaged in any way and from any source, including weather, vandalism and accidents during the construction period.
- D. Maintain glass in a reasonably clean condition during construction so that it will not become stained and will not contribute to deterioration of glazing materials.
- E. Clean glass surfaces when done.
- F. Wash and polish glass on both faces, not more than four days prior to date of substantial completion. Comply with instructions and recommendations of the Glass Manufacturer and Glazing Materials Manufacturer for cleaning in each case.

END 08800

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid:

1. General Contractor:

- a. All new gypsum wallboard and any accessories as needed to complete the work as shown on the drawings and specified herein.

1.2. RELATED WORK

A. Specified elsewhere:

1. 05400 - Cold Formed Metal Framing

1.3. QUALITY ASSURANCE

A. Gypsum wallboard construction shall comply with all laws, ordinances, rules, regulations and orders of public authorities having jurisdiction over this part of the work.

B. All materials shall be from a single manufacturer unless others are approved by the Architect/Engineer, to insure total unit responsibility. Installer shall be acceptable to the Manufacturer of the wallboard materials. All gypsum board installed shall be 5/8" fire rated (Type X.) and impact resistant for all walls. Regular gypboard for ceilings.

1.4. PRODUCT DELIVERY, STORAGE & HANDLING

A. Acceptance at site:

1. All materials shall be delivered to the job in their original, unopened containers or bundles; stored in a place providing protection from damage and exposure to the elements.
2. Damaged or otherwise unsuitable material, when so ascertained, shall be immediately removed from the job site.

B. Protection prior to installation:

1. Since the Owner will be occupying the building, storage of materials will be difficult. Coordinate deliveries to match use.
2. Protection must be provided by General Contractor against moisture, impact, etc.

1.5. SUBMITTALS. Submit product data in accordance with 01340.

2. PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- A. Gypsum wallboard, joint compound, etc.
 - 1. U.S. Gypsum
 - 2. Gold Bond – National Gypsum Corp.
 - 3. G-P Gypsum Corp.
 - 4. Lafarge North America

- B. Adhesive
 - 1. Contech PL200
 - 2. DAP 4000
 - 3. Miracle Adhesives Corp. DSA-20
 - 4. Ohio Sealants Inc., Formula 38

2.2. MATERIALS

- A. Gypsum Drywall: All material to be 4' X 8' (or larger) X 5/8" thick UL rated.
 - 1. All wall applications of gypsum board to be "Fiberbond" or abuse (impact) resistant, hard faced gypsum board, compressed facing.
 - 2. This product to be used in all interior locations.
 - 3. All "outside" 90° Edges such as corner and door jambs shall have 3/4" radius edge.

- B. Tape, Joint Compounds, Screws, Corner Edge Guards, etc.: Shall be manufactured by the manufacturer of the gypsum wall board or shall be manufactured to be compatible with all other system components.

- C. Trim items
 - 1. Corner beads flush taping style, galvanized.
 - 2. Expansion joints, flush taping style, galvanized or PVC.
 - 3. Edge beads, taping style, galvanized, selected for condition.
 - 4. 3/4" round at 45° corners.

2.3. ACCESSORY MATERIALS

- A. Screws: Type W and GWB; sized to suit thickness.
 - 1. Custom self-tapping screws along existing exterior wall.

- B. Corner Reinforcements, Casing Beads and Metal Trim: fabricated from 16-gauge galvanized sheet steel with perforated flanges, designed to receive joint compound.

- C. Joint Treatment Materials: ASTM C475-64 (1975).

3. EXECUTION

3.1. PREPARATION. Insure that studs are aligned and adequately braced so that resulting installation will be smooth and straight. Attachment shall be by screws ONLY, with spacing of screws per manufacturer's recommendations or these specifications whichever is more demanding.

3.2. INSTALLATION

A. Single or Double Layer Systems; Gypsum Panel Erection-Direct Attachment to metal studs and metal furring channels:

1. Place panels horizontally at right angles to framing, offset joints.
 - a. Position all ends centered on vertical framing members.
 - b. Use maximum practical lengths to minimize end joints.
 - c. Fit ends and edges closely, but not forced together. Stagger end joints in successive courses.
 - d. Place end joints on opposite sides of partitions on different studs.
 - e. When necessary, cut ends, edges and cutouts within the field of the panel in a workmanlike manner.
2. Screw fasteners in panel field first, work toward ends and edges.
 - a. Hold panel in place with firm contact and install screw fasteners at least 3/8" in from ends and edges.
 - b. Apply panels with power driven screws.
 - c. Attach gypsum panels to framing supports with 1-1/4" Type W screws at 8" o.c.

B. Wall systems shall employ 5/8" thick, impact resistant board unless noted otherwise.

1. Expansion joints neatly spaced at about 50" centers on long walls, select location for most efficient use.
2. Add expansion joints at site or during warranty where drywall cracking is anticipated or occurs due to installation conditions, structural framing, etc.

C. Accessories:

1. Round edge corner beads shall be installed on all exterior corners and at dissimilar materials, attached with suitable fasteners spaced 9" o.c. on both sides up to 60" above floor and shall be in single lengths unless corner exceeds standard stock lengths. Dimple set allowed only above 60".
2. Square edge metal trim shall be installed at all extruded edges and corners of wallboard, attached with suitable fasteners, spaced 9" o.c. and shall be in single full lengths unless application length exceeds standard stock lengths.
3. Wallboard screws shall be applied with an electric driver. Screws shall be secured not less than 3/8" from ends and edges of

wallboard for a uniform dimple not over 1/32" deep.

- D. Joint treatment compounds shall be mixed according to the Manufacturer's directions and applied as follows:
1. All "V" grooves formed by abutting eased radial edges of wallboard shall be filled flush with plane of taper with pre-fill compound. Excess compound beyond the "V" groove shall be wiped clean leaving a flat joint for taping.
 - a. Reinforcing tape shall be applied immediately, centered over joint, seated into compound.
 - b. A skim coat shall follow immediately, but shall not function as a fill or second coat.
 - c. Tape shall be properly folded and embedded in all angles to provide a true angle.
 - d. Tape all corner and edge beads with tape fully embedded into compound.
 2. After taping compound has hardened, topping compound shall be applied, filling board taper flush with surface.
 - a. Fill coat shall cover tape and feather out slightly beyond taper.
 - b. On joints with no taper, fill coat shall cover tape and feather out at least 6" on either side of tape.
 - c. Sanding or wet wiping shall be done after material has hardened.
 3. A finishing coat of taping compound shall be spread evenly over and extending slightly beyond fill coat on all joints and feathered to a smooth, uniform finish.
 - a. Over tapered edges, finished joint shall not protrude beyond plane or surface.
 - b. All taped angles shall receive a finish coat to cover tape and taping compound, and provide a true angle.
 - c. Sanding or wet wiping shall be done after final application of compound to provide a smooth surface, ready for decoration. Use wet wiping in all occupied areas.
 4. Fastener depressions shall have at least two (2) coats of taping compound, leaving all depressions level with surface plane. Sand or wet wipe fastener depressions after each application hardens.
 5. Taping compound shall be applied to all bead and trim and shall be feathered out from ground to plane of surface.
 - a. When hardened, this shall be followed by two (2) coats of taping compound applied separately and allowed to dry between coats.
 - b. Each coat shall extend slightly beyond previous coat.
 6. Joints concealed from sight shall be fire taped - smoothing shall not

be required.

7. Apply joint sealants as appropriate at edge beads to dissimilar materials and expansion beads.
8. Walls in Rooms 50A, 50B, and 50C may have Finish Level 3. Prime wall. Ceiling in Room 50A, 50B, and 50C have Finish Level 4. Where gypsum board is installed on both sides of the removed windows in Rooms 48, 49, 50C and 52 shall have Finish Level 4.

3.3. FINISHING. All exposed gypsum board installation shall receive finish coating per finish schedule.

A. See Section 09900 - Finish Coatings.

FINISH LEVEL MATRIX

Finishing Level	Final Appearance	How to Achieve Result		
		Joints & Interior Angles	Accessories & Fasteners	Surface
5	Entire surface covered with a) SHEETROCK Brand Primer Surfacer (Tuff-Hide) or b) Skim coat of compound and ready to prime before decorating with gloss, semigloss or enamels or enamel paint.	As on Level 4	As in Level 4	SHEETROCK Brand Primer Surfacer (Tuff-Hide) or skin coat and prime with CGC First Coat, Synko Brand Pre-Coat before painting or texturing
4	No marks or ridges. Ready for priming, followed by wallcoverings, flat paints or light textures.	Two separate coats of compound over Level 2	Three separate coats of compound	Joints filled and smoothed again. Shall be primed with CGC First Coat before painting or texturing.
3	No marks or ridges. Ready for priming, to be followed by heavy textures.	One separate coat of compound over Level 2	Two separate coats of compound	Joints filled and smooth. Shall be prime with CGC First Coat before painting or texturing
2	Tool marks and ridges okay. Thin coating of compound covers tape; one coat compound over fastener heads.	Tape embedded in compound and immediately wiped to leave a thin coating of compound over tape	One coat of compound	Free of excess compound
1	Tool marks and ridges acceptable.	Tape embedded in compound.	Optional – One coat of compound	Free of excess compound
0	Unfinished	None		

3.4. CLEAN UP. Remove all sanding dust and any excess or spilled material from all surfaces.

END 09250

1. GENERAL

1.1. DESCRIPTION

- A. General Contractor shall furnish all labor and materials necessary to complete composite applied flooring in areas noted.
 - A. Floor in Room 115 only.
 - B. Install 4” core base on all painted and repainted walls.

1.2. PRODUCT HANDLING

- A. Transport all materials to job site in Manufacturer’s labeled containers.

1.3. WARRANTY

- A. The Product Manufacturer shall exercise power of approval of installers.
 - A. Installers shall have applied similar flooring products on at least five (5) prior projects.
- B. The Product Manufacturer shall warrant the finished installation for a period of three (3) years following Substantial Completion of the project.
 - A. Abuse to the installation counter to use and maintenance recommendations (1.3.A.3 above) excepted.
- C. The Contractor shall warrant the installation for a period of two (2) years following Substantial Completion date.
 - A. Abuse of the installation counter to use and maintenance recommendations (1.3.A.3. above) excepted.

2. PRODUCTS

2.1. MATERIALS

- A. Floor system
 - 1. COREtec - COREtec Plus Tile
 - 2. Quartz Epoxy Tnemec, Series 222 with Deco Clear.
 - 3. Epoxy Quartz BC by Florock.
 - 4. Or equal, approved prior to bidding.
- B. LVT floating Glue
 - 1. Engineered vinyl floating floor system.
 - 2. Glue less locking
 - 3. 20 mil wear layer
 - 4. Owner may select from:

- a. 'tile' nominal 24" x 24"
- 5. Products
 - a. Bentley Arcade Legend Fast Track
- C. Adhesives: Adhesives shall be water and alkali resistant, complying with recommendations of resilient flooring manufacturer as applicable to substrate. Adhesive shall contain no asbestos and no VOC's.
 - 1. Manufacturer's recommended adhesive, for pressure sensitive installation and removal:
 - a. Rated to 8 lbs. moisture vapor and 12-pH.
- D. Rubber Base: 1/8" gauge, coved, preformed corners,
 - 1. Four inches (4") high in new areas, 4 ¼" high in all areas where old base is removed, (4" under lockers). Unless otherwise shown; color shall be selected from the full range of available standard colors.
 - 2. Afco
 - 3. Johnsonite
 - 4. Roppe
 - 5. Or equal
- E. Vinyl Edge/transition Strips: 1½ " wide for tile
 - 1. Afco
 - 2. Johnsonite
 - 3. Roppe
 - 4. Or equal
- F. Carpet edge strips, dissimilar floor transitions and system transitions. Select as appropriate to the floor conditions, suggested styles are for discussion. Always verify a snug and appropriate profile with good adhesive surface lapping under at least one side if possible.
 - 1. Afco JV #212 or JV #213 as appropriate
 - 2. Johnsonite EG-XX-G or EG-XX-H as appropriate
 - 3. Roppe #156 or #160 as appropriate
 - 4. Or equal
- G. See details on the drawings for a continuous ¼" x 5" nominal dark bronze extruded aluminum threshold used as an edge along the gym sage side,

3. EXECUTION

3.1. PREPARATION

- A. Existing conditions

1. Surfaces, always verify surface conditions in all locations for needed fillers or repair or deficiencies.
2. Prepare and clean all surfaces as appropriately to receive the new flooring.
 - a. Strip wax where new floors are glued over existing.

B. Fixed equipment

1. Lockers and casework, cut to fit, cut removals to the edge line for accurate fit.

C. Before installing resilient flooring, fill all cracks and holes and level depressions and skim coat with cement base surface preparation system.

1. Check for flush fit at drain and cleanout rims, grind if necessary or raise or bevel surfaces as appropriate.
2. It is intended that any or all surfaces be skim leveled

3.2. INSTALLATION

A. Typically tile selections are to split under doors unless there are extenuating conditions.

B. Generally the transition to adjacent surfaces may take a leveling filler.

C. Where flooring types vary such as resilient to carpet or floating to carpet a transition strip will be required.

D. Transition strips should always be beveled with feather edges selected appropriately for the conditions.

E. Install tile and apply resilient base to floor or walls and cabinet bases respectively.

- a. Inspect surfaces prior to installation of floors and base. Do not apply to rough, dirty or unprepared surfaces.
- b. Corners shall be preformed.
- c. Cope inside base corners. Scribe bases accurately to abutting surfaces.
- d. Apply adhesive uniformly on the back surface of the base with a notched trowel, single or double ribbon of adhesive not acceptable.

F. Install carpet tile per manufacturer's instructions, offset joints, generally perpendicular to the primary entrance,

- a. Carefully install and secure transition strips from floating to adhered or carpeted flooring

END 09670

1. GENERAL

1.1. WORK INCLUDES – BASE BID

- A. Contractor shall provide all painting work as set forth on the Drawings, in these Specifications and as necessary for the completion of the work. All new equipment and surfaces not receiving a specified finish shall be painted. See Drawings and drawing notes.
- B. Paint walls in Room 115 (east and south). Paint gypboard walls in Room 4 Lobby (north and west). Prime new gypboard and paint 2 coats.
- C. Paint metal doors and frames as indicated 2 coats.
 - 1. Aluminum door do not paint.

1.2. RELATED REQUIREMENTS

- A. Specified elsewhere
 - 1. DIVISION 0 - Bidding & Contract Requirements
 - 2. DIVISION 1 - General Requirements
 - 3. DIVISION 6 - Wood
 - 4. DIVISION 7 - Thermal & Moisture Protection
 - 5. DIVISION 8 - Doors & Windows
 - 6. Section 09250 - Gypsum Wallboard

1.3. QUALITY ASSURANCE

- A. Supplier shall verify appropriateness of paint systems/surface preparation and modify as approved by Architect to properly achieve finished result.
- B. Materials shall be as specified and shall be delivered to the job in unopened, labeled containers.
- C. Applicators shall be skilled in the application system employed.
- D. Application: No thinning of materials will be allowed, except as specifically recommended by the Paint Manufacturer's written data to facilitate application.
- E. Special Requirements: The written instructions of the Paint Manufacturer shall be carefully adhered to for all surface preparation, priming, application techniques, environmental conditions and drying conditions.
- F. The surface temperature shall be 50 degrees F. minimum, dry, free of dust, dirt or any bond-breaking substance prior to the paint application.
- G. Protect all surrounding surfaces from paint and the painting operations. CLEAN UP ALL PAINT SPATTER OR OVERSPRAY.

- H. Factory-primed surfaces shall be properly prepared to receive field coatings. Repair chips and nicks in factory primer before proceeding.
- I. Provide all surface preparation, treatments, and all primers needed to comply with the Paint Manufacturer's recommendations. The Contractor shall seek the Paint Manufacturer recommendations and shall be responsible for compatibility of the specified coatings and receiving surface preparation.
- J. Wherein these Specifications require successive coats of finishing materials, the A/E shall be notified of completion of each coating application prior to application of a successive coating. Failure to notify the Architect for on site observation of each coating prior to a successive coating application shall disallow acceptance of the successive coating.

2. PRODUCTS

2.1. MATERIAL

- A. Flame Spread - All paint finishes shall meet the following flame spread requirements:
 - 1. Flame Resistance: Materials shall neither ignite nor flame when inserted into a furnace heated to and maintained at 1200 degrees F. for a period of five minutes.
 - 2. Submit Paint Manufacturer's WRITTEN certification that products used on this project meet or exceed requirements 1.1.D.1. above. Certification shall include submittal or current test data proving product is noncombustible, as defined per 1.1.D.1 above.
- B. It is the intent to use each Manufacturer's premium grade commercial finishes. Adjust selections accordingly.
- C. Galvanized or Aluminum
 - 1. Select appropriate zinc chromate or zinc dust primer.
- D. Latex Primers (Interior – on new gypsum board walls and CMU Walls)
 - 1. Sherwin Williams ProMar 200/B23W200
 - 2. Glidden Spred Primer Sealer Y3416 Series.
 - 3. MAB Fresh Kote 037 Line.
 - 4. Benjamin Moore Latex O.D. Prime Seal 201-00.
 - 5. Tnemec Series 51-792 Sealer.
 - 6. Pittsburgh Speedhide Primer Sealer #6-2.
 - 7. Or as specifically recommended by the Manufacturer for the proposed finish coat.
- E. Latex Semi
 - 1. Sherwin-Williams

2. Porter H-Hide 109
 3. Benjamin Moore Regal Aquaglo 333
 4. Pittsburgh Wallhide
 5. DeVoe WonderTone 37
- F. Latex Eggshell (interior Workroom 115 wall)
1. Sherwin-Williams
 2. Porter Hi-Hide 389
 3. Benjamin Moore Moorecraft 186
 4. Pittsburg Wall Hide
 5. DeVoe WonderTone 34
- G. Epoxy Egg Shell N.I.C.
1. Sherwin Williams pre catalyzed Epoxy #B73 – 2 coats. This product used in Restroom 117.1.
- H. Latex Semi-Gloss Finish (Interior metal) N.I. C.
1. Sherwin Williams DTM Acrylic CTG
 2. Benjamin Moore DTM M29
 3. Pittsburgh 7-374
- I. Gloss Latex (60% @ 60 degrees F.): N.I.C.
1. DTM Products, similar to semi-gloss specification.
- J. Sanding Sealer for natural finishes - use Manufacturer's recommended sanding sealer or thin urethane varnish as appropriate.
- K. Varnish - Polyurethane satin or "hand rubbed" finish for wood window trim.
1. Sherwin Williams A67 Series
 2. Glidden Satin Polyurethane.
 3. Benjamin Moore Impervo Satin 414.
 4. Pittsburgh REZ Polyurethane #77-9.

3. EXECUTION

3.1. SURFACE CONDITIONS

- A. Inspect all surfaces for defects prior to starting finishing operations and notify the appropriate persons to make suitable repair and corrections. Be responsible for all rework of finish systems made necessary by application to improperly prepared surfaces.
- B. As painting operations proceed inspect for chips, abrasions, mortar slobbers, pitch strikes, cracks and hot spots. All defects that are evident shall be repaired and repainted.
- C. Touch up marred or worn factory primers before painting. Wash down

metal with mineral spirits or approved cleaner to assure bond.

- D. PROVIDE PRIMERS IN ALL LOCATIONS APPROPRIATE FOR MATERIAL BASE AND MATERIAL EXPOSURE.
- E. Protect all surrounding work from damage.
- F. Sand surfaces that are not smooth prior to applying succeeding coats.

3.2. WORKMANSHIP

- A. Quality workmanship is required. Only skilled mechanics shall be employed to ensure the very best workmanship. Materials to be applied by craftsmen shall be applied only by those familiar with the specific products involved.
- B. Each coat called for shall be applied to achieve 100% coverage of the surface and materials shall be applied as recommended by the Paint Manufacturer.
- C. One coat shall be considered to completely cover the material being finished such that the surface, including all voids and indentations such as in wood or concrete block, no longer retains the color of the surface material but only that of the finish applied. The cover achieved will be subject to the approval of the Architect/Engineer in all cases.
 - 1. Every applied coat shall be allowed to dry before subsequent coats are applied.
- D. For finishes similar in color to the material or for finishes with little or no pigments, such as varnish, the coats shall be of adequate thickness to meet the approved requirements assuming that the surface and finish were of complementary colors. The cover achieved will be subject to the approval of the Architect/Engineer in all cases.
- E. In the process of painting surfaces, caution shall be used to avoid discontinuity in the finish surface texture or appearance such as at lap joints, corners, etc.
- F. All materials shall be applied under 100 F.C. illumination. Materials shall be uniformly spread without runs or sags.
- G. All coating called for shall be applied in back of all fixtures, cabinets and tackboards before said items are secure in place.

3.3. STORAGE

- A. Flammable materials storage should be kept to a minimum of currently-in-use materials only. Overnight storage shall not be allowed in the building.

3.4. APPLICATION

- A. Application rates that are specified in these Specifications shall be considered as minimum rates but shall not supersede the coverage requirements specified herein or the recommendations of the Paint Manufacturer.
- B. It is the intent that all finish coating systems specified (excluding primer only) present a finished uniform appearance, free of lap marks, color variation, sheen variation and irregularities. Provide additional coats as needed to accomplish this finish intent.
- C. Application shall be per the following schedule except that, in no case, shall materials be applied over a base preparation not in accordance with the Paint Manufacturer's specifications. See Drawing Notes and Room Finish Schedule for finishing directions.
- D. Interior masonry and gypsum board walls
 - 1. Apply block filler to masonry
 - 2. Clean all dust off gypboard walls and prime one (1) coat.
 - 3. Masonry and gypboard wall – apply two (2) coats.
 - 4. Steel doors and frames – clean and check factory primer – apply two (2) coats DTM.
 - 5. Wood trim – clean and apply two (2) coats polyurethane.

END 09900

DIVISION 15 - MECHANICAL
Section 15010 – Basic Mechanical Requirements

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this and the other sections of Division 15.

1.2 SUMMARY

- A. This Section includes general administrative and procedural requirements for mechanical installations.
- B. Provide duct extensions to Room 115 from the existing main line from Server Room 119. Cut opening in 12" masonry wall to 12" x 8" near duct extension.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.
- B. Refer to equipment specifications in Divisions 2 through 16 for rough-in requirements.

3.2 MECHANICAL INSTALLATIONS

- A. General: Sequence, coordinate, and integrate the various elements of mechanic materials, and equipment. Comply with the following requirements:
 - 1. Coordinate mechanical systems, equipment, and materials installation with other building components.
 - 2. Verify all dimensions by field measurements.
 - 3. Arrange for chases, slots, and openings in other building components during progress of construction, to allow for mechanical installations.
 - 4. Coordinate the installation of required supporting devices and sleeves to be set in poured-in-place concrete and other structural components, as they are constructed.

5. Sequence, coordinate, and integrate installations of mechanical materials and equipment for efficient flow of the Work. Give particular attention to large equipment requiring positioning prior to closing in the building.
6. Where mounting heights are not detailed or dimensioned, install systems, materials, and equipment to provide the maximum headroom possible.
7. Coordinate connection of mechanical systems with exterior underground and overhead utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies. Provide required connection for each service.
8. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces.
10. Install mechanical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations. Extend grease fittings to an accessible location.

3.3 CUTTING AND PATCHING

- A. General: Perform cutting and patching in accordance with Division 1 Section "CUTTING AND PATCHING." In addition to the requirements specified in Division 1, the following requirements apply:
 1. Protection of Installed Work: During cutting and patching operations, protect adjacent installations.
- B. Perform cutting, fitting, and patching of mechanical equipment and materials required to:
 1. Uncover Work to provide for installation of ill-timed Work.
 2. Remove and replace defective Work.
 3. Remove and replace Work not conforming to requirements of the Contract Documents.
 4. Upon written instructions from the Architect, uncover and restore Work to provide for Architect/Engineer observation of concealed Work.

3.4 MECHANICAL DEMOLITION

- A. General: It is the intent of this project to modify the existing HVAC system within the subject building:
 1. Oakdale Elementary School:
 - a. Selectively demolish and reconfigure existing ductwork as shown on plan.

END 15010

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Requirements of the following Division 15 Sections apply to this section:
 - 1. "Basic Mechanical Requirements."

1.2 SUMMARY

- A. This Section includes rectangular metal ducts for heating, ventilating, and air conditioning systems in pressure classes from minus 2 inches to plus 10 inches water gage.
 - 1. This project is modifying an existing duct system. The new ductwork is changing the location of ducts and adding one new outlet. The heat pump providing the tempered air is not changing capacity.
- B. Related Sections: The following sections contain requirements that relate to this Section:
 - 1. Division 7 Section "Joint Sealers" for fire-resistant sealants for use around duct penetrations and fire damper installations in fire rated floors, partitions, and walls.
 - 2. Division 15 Section "Duct Accessories" for flexible duct materials, dampers, duct-mounted access panels and doors, and turning vanes.
 - 3. Division 15 Section "Air Inlets and Outlets."
 - 4. Division 15 Section "Testing, Adjusting, and Balancing."
 - 5. Division 15 Section "Duct Insulation."

1.3 DEFINITIONS

- A. Sealing Requirements Definitions: For the purposes of duct systems sealing requirements specified in this Section, the following definitions apply:
 - 1. Seams: A seam is defined as joining of two longitudinally (in the direction of airflow) oriented edges of duct surface material occurring between two joints. All other duct surface connections made on the perimeter are deemed to be joints.
 - 2. Joints: Joints include girth joints; branch and sub-branch intersections; so-called duct collar tap-ins; fitting subsections; louver and air terminal connections to ducts; access door and access panel frames and jambs; duct, plenum, and casing abutments to building structures.

1.4 SYSTEM PERFORMANCE REQUIREMENTS

- A. The duct system design, as indicated, has been used to select and size air moving and distribution equipment and other components of the air system.

PART 2 - PRODUCTS

2.1 SHEET METAL MATERIALS

- A. Sheet Metal, General: Provide sheet metal in thicknesses indicated, packaged and marked as specified in ASTM A 700.
- B. Galvanized Sheet Steel: Lock-forming quality, ASTM A 527, Coating Designation G 90. Provide mill phosphatized finish for exposed surfaces of ducts exposed to view.
- C. Reinforcement Shapes and Plates: Unless otherwise indicated, provide galvanized steel reinforcing where installed on galvanized sheet metal ducts. For aluminum and stainless steel ducts provide reinforcing of compatible materials.
- D. Tie Rods: Galvanized steel, 1/4-inch minimum diameter for 36-inch length or less; 3/8-inch minimum diameter for lengths longer than 36 inches.

2.2 HANGERS AND SUPPORTS

- A. Building Attachments: Concrete inserts, powder actuated fasteners, or structural steel fasteners appropriate for building materials. Do not use powder actuated concrete fasteners for lightweight aggregate concretes or for slabs less than 4 inches thick.
- B. Hangers: Galvanized sheet steel, or round, uncoated steel, threaded rod.
 - 1. Hangers Installed In Corrosive Atmospheres: Electro-galvanized, all-thread rod or hot-dipped-galvanized rods with threads painted after installation.
 - 2. Straps and Rod Sizes: Conform with Table 4-1 in SMACNA HVAC Duct Construction Standards, 1985 Edition, for sheet steel width and gage and steel rod diameters.
- C. Duct Attachments: Sheet metal screws, blind rivets, or self-tapping metal screws; compatible with duct materials.

2.3 RECTANGULAR DUCT FABRICATION

- A. General: Except as otherwise indicated, fabricate rectangular ducts with galvanized sheet steel, in accordance with SMACNA "HVAC Duct Construction Standards," Tables 1-3 through 1-19, including their associated details. Conform to the requirements in the referenced standard for metal thickness, reinforcing types and intervals, tie rod applications, and joint types and intervals.
 - 1. Fabricate rectangular ducts in lengths appropriate to reinforcement and rigidity class required for pressure classification.
 - 2. Provide materials that are free from visual imperfections such as pitting, seam marks, roller marks, stains, and discolorations.
- B. Static Pressure Classifications: Except where otherwise indicated, construct duct systems to the following pressure classifications:
 - 1. Supply and Fresh Air Ducts: 3 inches water gage.
 - 2. Return Ducts: 2 inches water gage, negative pressure.
 - 3. Exhaust Ducts: 2 inches water gage, negative pressure.
- C. Crossbreaking or Cross Beading: Crossbreak or bead duct sides that are 19 inches

and larger and are 20 gage or less, with more than 10 sq. ft. of unbraced panel area, as indicated in SMACNA "HVAC Duct Construction Standard," Figure 1-4, unless they are lined or are externally insulated.

2.4 RECTANGULAR DUCT FITTINGS

- A. Fabricate elbows, transitions, offsets, branch connections, and other duct construction in accordance with SMACNA "HVAC Metal Duct Construction Standard," 1985 Edition, Figures 2-1 through 2-10.

2.5 SEALING MATERIALS

- A. Joint and Seam Sealants, General: The term sealant used here is not limited to materials of adhesive or mastic nature, but also includes tapes and combinations of open weave fabric strips and mastics.
- B. Tape Sealing System: Woven-fiber tape impregnated with a gypsum mineral compound and a modified acrylic/silicone activator to react exothermically with the tape to form a hard, durable, airtight seal.
- C. Joint and Seam Sealant: One-part, nonsag, solvent-release-curing, polymerized butyl sealant complying with FS TT-S-001657, Type I; formulated with a minimum of 75 percent solids.
- D. Flanged Joint Mastics: One-part, acid-curing, silicone elastomeric joint sealants, complying with ASTM C 920, Type S, Grade NS, Class 25, Use O.

PART 3 - EXECUTION

3.1 DUCT INSTALLATION, GENERAL

- A.. Install ducts with the fewest possible joints.
- B. Use fabricated fittings for all changes in directions, changes in size and shape, and connections.
- C. Install couplings tight to duct wall surface with projections into duct at connections kept to a minimum.
- D. Locate ducts, except as otherwise indicated, vertically and horizontally, parallel and perpendicular to building lines; avoid diagonal runs. Install duct systems in shortest route that does not obstruct useable space or block access for servicing building and its equipment.
- E. Install ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building.
- F. Provide clearance of 1 inch where furring is shown for enclosure or concealment of ducts, plus allowance for insulation thickness, if any.
- G. Install insulated ducts with 1-inch clearance outside of insulation.
- H. Conceal ducts from view in finished and occupied spaces by locating in mechanical

shafts, hollow wall construction, or above suspended ceilings. Do not encase horizontal runs in solid partitions, except as specifically shown.

- I. Coordinate layout with suspended ceiling and lighting layouts and similar finished work.
- J. Non-Fire-Rated Partition Penetrations: Where ducts pass interior partitions and exterior walls, and are exposed to view, conceal space between construction opening and duct or duct insulation with sheet metal flanges of same gage as duct. Overlap opening on 4 sides by at least 1-1/2 inches.

3.2 SEAM AND JOINT SEALING

- A. General: Seal duct seams and joints as follows:
- B. Pressure Classification 2 and 3 Inches Water Gage: All transverse joints, longitudinal seams and duct penetrations.
- C. Seal externally insulated ducts prior to insulation installation.

3.3 HANGING AND SUPPORTING

- A. Install rectangular metal duct with support systems indicated in SMACNA "HVAC Duct Construction Standards," Tables 4-1 through 4-3 and Figures 4-1 through 4-8.
- B. Support horizontal ducts within 2 feet of each elbow and within 4 feet of each branch intersection.

3.4 CONNECTIONS

- A. Branch Connections: Comply with SMACNA "HVAC Duct Construction Standards," Figures 2-7 and 2-8.
- B. Outlet and Inlet Connections: Comply with SMACNA "HVAC Duct Construction Standards," Figures 2-16 through 2-18.

3.5 FIELD QUALITY CONTROL

- A. Disassemble, reassemble, and seal segments of the systems as required to accommodate leakage testing, and as required for compliance with test requirements.
- B. Determine leakage from entire system or section of the system by relating leakage to the surface area of the test section.

3.6 ADJUSTING AND CLEANING

- A. Adjust volume control devices as required by the testing and balancing procedures to achieve required air flow. Refer to Division 15 Section "TESTING, ADJUSTING, AND BALANCING" for requirements and procedures for adjusting and balancing air systems.

END 15891

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

1.2 DESCRIPTION OF WORK

- A. Extent of air outlets and inlets work is indicated by drawings and schedules, and by requirements of this section.
- B. Types of outlets and inlets required for project include the following:
 - 1. Duct grills.
- C. Refer to other Division-15 sections for ductwork and duct accessories required in conjunction with air outlets and inlets; not work of this section.
- D. Refer to other Division-15 sections for balancing of air outlets and inlets; not work of this section.

1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Firms regularly engaged in manufacture of air outlets and inlets of types and capacities required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Codes and Standards:
 - 1. ARI Compliance: Test and rate air outlets and inlets in accordance with ARI 650 "Standard for Air Outlets and Inlets".
 - 2. ASHRAE Compliance: Test and rate air outlets and inlets in accordance with ASHRAE 70 "Method of Testing for Rating the Air Flow Performance of Outlets and Inlets".
 - 3. ADC Compliance: Test and rate air outlets and inlets in certified laboratories under requirements of ADC 1062 "Certification, Rating and Test Manual".
 - 4. ADC Seal: Provide air outlets and inlets bearing ADC Certified Rating Seal.
 - 5. AMCA Compliance: Test and rate louvers in accordance with AMCA 500 "Test Method for Louvers, Dampers and Shutters".
 - 6. AMCA Seal: Provide louvers bearing AMCA Certified Rating Seal.
 - 7. NFPA Compliance: Install air outlets and inlets in accordance with NFPA 90A "Standard for the Installation of Air Conditioning and Ventilating Systems".

END 15932

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)
Section 23 0501 - MINOR HVAC DEMOLITION AND REPAIRS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. HVAC demolition.
 - 1. Exhaust Fans
 - 2. Equipment
 - 3. Ductwork
 - 4. Piping

1.02 RELATED REQUIREMENTS

- A. Additional requirements for alterations work.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.
 - 1. Provide new opening through new metal stud wall between Room 4 (Lobby) and Room 115 (Office). Modify the duct passages through the wall separating Room 115A and 119.
 - 2. Install new grills on walls or on ductwork as indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify field measurements and duct arrangements are as shown on Drawings.
- B. Verify that abandoned ductwork and equipment is removed.
- C. Demolition drawings are based on field observation .
- D. Report discrepancies to Architect before disturbing existing installation.
- E. Beginning of demolition means installer accepts existing conditions.

3.02 PREPARATION

- A. Disconnect HVAC systems in walls, floors, and ceilings to be removed.
- B. Existing HVAC System: Maintain existing system in service until coordinated with Owner for length of out of service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 24 hours before partially or completely disabling system.

3.03 DEMOLITION AND EXTENSION OF EXISTING HVAC WORK

- A. Remove, relocate, and extend existing installations to accommodate new construction.
- B. Remove abandoned ductwork to source of supply.
- C. Remove exposed abandoned ductwork, including abandoned ductwork above accessible ceiling finishes. Cut ductwork flush with walls and floors, and patch surfaces.
- D. Disconnect abandoned air outlets and inlets and remove. Remove abandoned air outlets and inlets if ductwork servicing them is abandoned and removed. Provide blank covers for abandoned air outlets and inlets that are not removed.
- E. Add exhaust fans as noted.
- F. Remove piping as noted.
- G. Repair adjacent construction and finishes damaged during demolition and extension work.
- H. Maintain access to existing HVAC installations that remain active. Modify installation or provide access panel as appropriate.
- I. Extend existing installations using materials and methods as specified.

3.04 CLEANING AND REPAIR

- A. Clean and repair existing materials and equipment that remain or that are to be reused.

END 23 0501

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical demolition.

1.02 RELATED REQUIREMENTS

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify field measurements and circuiting arrangements are as shown on Drawings.
- B. Demolition drawings are based on field observation.
- C. Report discrepancies to Architect before disturbing existing installation.
- D. Beginning of demolition means installer accepts existing conditions.

3.02 PREPARATION

- A. Disconnect electrical systems in walls, floors, and ceilings to be removed.
- B. Coordinate utility service outages with utility company.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.
- D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 24 hours before partially or completely disabling system.
- E. Existing Fire Alarm System: Maintain existing system in service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Notify Owner before partially or completely disabling system.
 - 2. Notify local fire service.
 - 3. Make notifications at least 24 hours in advance.
 - 4. Make temporary connections to maintain service in areas adjacent to work area.
- F. Existing Telephone System: Maintain existing system in service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Notify Owner at least 24 hours before partially or completely disabling system.
 - 2. Notify telephone utility company at least 24 hours before partially or completely disabling system.
 - 3. Make temporary connections to maintain service in areas adjacent to work area.

3.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Perform work for removal and disposal of equipment and materials containing toxic substances regulated under the Federal Toxic Substances Control Act (TSCA) in accordance with applicable federal, state, and local regulations. Applicable equipment and materials include, but are not limited to:
 - 1. PCB-containing electrical equipment, including transformers, capacitors, and switches.
 - 2. PCB- and DEHP-containing lighting ballasts.
 - 3. Mercury-containing lamps and tubes, including fluorescent lamps, high intensity discharge (HID), arc lamps, ultra-violet, high pressure sodium, mercury vapor, ignitron tubes, neon, and incandescent.

- B. Remove, relocate, and extend existing installations to accommodate new construction.
- C. Remove abandoned wiring to source of supply.
- D. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
- E. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.
- F. Repair adjacent construction and finishes damaged during demolition and extension work.
- G. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.

3.04 CLEANING AND REPAIR

- A. See Section 01 7419 - Construction Waste Management and Disposal for additional requirements.
- B. Clean and repair existing materials and equipment that remain or that are to be reused.
- C. Panelboards: Clean exposed surfaces and check tightness of electrical connections. Replace damaged circuit breakers and provide closure plates for vacant positions. Provide typed circuit directory showing revised circuiting arrangement.

END 26 0501

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical metallic tubing (EMT).
- B. Conduit fittings.
- C. Accessories.

1.02 RELATED REQUIREMENTS

- A. Section 26 0529 - Hangers and Supports for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. ANSI C80.3 - American National Standard for Steel Electrical Metallic Tubing (EMT); 2005.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- C. UL 1 - Flexible Metal Conduit; Current Edition, Including All Revisions.
- D. UL 797 - Electrical Metallic Tubing-Steel; Current Edition, Including All Revisions.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70 and product listing.
- B. Unless otherwise indicated and where not otherwise restricted, use the conduit types indicated for the specified applications. Where more than one listed application applies, comply with the most restrictive requirements. Where conduit type for a particular application is not specified, use galvanized steel rigid metal conduit.
- C. Concealed Within Hollow Stud Walls: Use galvanized steel rigid metal conduit.
- D. Concealed Above Accessible Ceilings: Use galvanized steel rigid metal conduit or electrical metallic tubing (EMT).
- E. Interior, Damp or Wet Locations: Use galvanized steel rigid metal conduit.
- F. Exposed, Interior, Subject to Physical Damage: Use galvanized steel rigid metal conduit.
 - 1. Locations subject to physical damage include, but are not limited to:
 - a. Where exposed below 8 feet, except within electrical and communication rooms or closets.
 - b. Where exposed below 20 feet in gym.
- G. Connections to Luminaires Above Accessible Ceilings: Use flexible metal conduit.
- H. Connections to Vibrating Equipment:
 - 1. Dry Locations: Use flexible metal conduit.
 - 2. Maximum Length: 6 feet unless otherwise indicated.

2.02 CONDUIT REQUIREMENTS

- A. Existing Work: Where existing conduits are indicated to be reused, they may be reused only where they comply with specified requirements, are free from corrosion, and integrity is verified by pulling a mandrel through them.
- B. Provide all conduit, fittings, supports, and accessories required for a complete raceway system.
- C. Provide products listed, classified, and labeled as suitable for the purpose intended.
- D. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 FLEXIBLE METAL CONDUIT (FMC)

- A. Description: NFPA 70, Type FMC standard wall steel flexible metal conduit listed and labeled as complying with UL 1, and listed for use in classified firestop systems to be used.
- B. Fittings:
 - 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 - 2. Material: Use steel or malleable iron.

2.04 ELECTRICAL METALLIC TUBING (EMT)

- A. Description: NFPA 70, Type EMT steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.
- B. Fittings:
 - 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 - 2. Material: Use steel or malleable iron.
 - 3. Connectors and Couplings: Use compression (gland) or set-screw type.
 - a. Do not use indenter type connectors and couplings.

2.05 ACCESSORIES

- A. Pull Strings: Use nylon cord with average breaking strength of not less than 200 pound-force.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install conduit in a neat and workmanlike manner in accordance with NECA 1.
- C. Conduit Routing:
 - 1. Conceal all conduits unless specifically indicated to be exposed.
- D. Conduit Support:
 - 1. Secure and support conduits in accordance with NFPA 70 and Section 26 0529 using suitable supports and methods approved by the authority having jurisdiction.
 - 2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
 - 3. Installation Above Suspended Ceilings: Do not provide support from ceiling support system. Do not provide support from ceiling grid or allow conduits to lay on ceiling tiles.
- E. Connections and Terminations:
 - 1. Use suitable adapters where required to transition from one type of conduit to another.
 - 2. Provide insulating bushings or insulated throats at all conduit terminations to protect conductors.
 - 3. Secure joints and connections to provide maximum mechanical strength and electrical continuity.
- F. Penetrations:
 - 1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
 - 2. Make penetrations perpendicular to surfaces unless otherwise indicated.
 - 3. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
 - 4. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
 - 5. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.

- G. Condensation Prevention: Where conduits cross barriers between areas of potential substantial temperature differential, provide sealing fitting or approved sealing compound at an accessible point near the penetration to prevent condensation. This includes, but is not limited to:
1. Where conduits pass from outdoors into conditioned interior spaces.
 2. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.

3.02 PROTECTION

- A. Immediately after installation of conduit, use suitable manufactured plugs to provide protection from entry of moisture and foreign material and do not remove until ready for installation of conductors.

END 26 0534

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Outlet and device boxes up to 100 cubic inches, including those used as junction and pull boxes.
- B. Cabinets and enclosures, including junction and pull boxes larger than 100 cubic inches.

1.02 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment, or other potential obstructions within the dedicated equipment spaces and working clearances for electrical equipment required by NFPA 70.
 - 2. Coordinate the work with other trades to preserve insulation integrity.
 - 3. Coordinate the work with other trades to provide walls suitable for installation of flush-mounted boxes where indicated.
 - 4. Notify Architect of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.

PART 2 PRODUCTS

2.01 BOXES

- A. General Requirements:
 - 1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
 - 2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
- B. Outlet and Device Boxes Up to 100 cubic inches, Including Those Used as Junction and Pull Boxes:
 - 1. Use sheet-steel boxes for dry locations unless otherwise indicated or required.
 - 2. Use shallow boxes where required by the type of wall construction.
 - 3. Boxes for Supporting Luminaires and Ceiling Fans: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.
- C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches:
 - 1. Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Perform work in a neat and workmanlike manner in accordance with NECA 1 and, where applicable, NECA 130, including mounting heights specified in those standards where mounting heights are not indicated.

- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- D. Box Locations:
 - 1. Locate boxes to be accessible. Provide access panels in accordance with Section 08 3100 as required where approved by the Architect.
- E. Flush-Mounted Boxes:
 - 1. Install boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that front edge of box or associated raised cover is not set back from finished surface more than 1/4 inch or does not project beyond finished surface.
 - 2. Install boxes in combustible materials such as wood so that front edge of box or associated raised cover is flush with finished surface.
 - 3. Repair rough openings around boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that there are no gaps or open spaces greater than 1/8 inch at the edge of the box.
- F. Install boxes as required to preserve insulation integrity.

END 26 0537

DIVISION 26 - ELECTRICAL
Section 26 0920 – ELECTRICAL FIXTURES

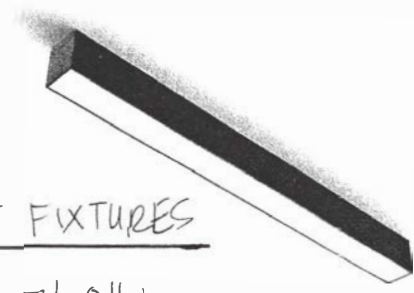
PART 1 PRODUCTS

1.01 FIXTURES

- A. See Plan Sheet ME - 1
- B. Provide light fixtures shown on Plan
- C. Provide new receptacles as shown

SLOT 4 LED

Surface Mount



LIGHT FIXTURES

L1: 7'-0" L
L2: 5'-0" L

ADWW L7E5RD WHT N80

Intended Use
Slot 4 LED takes both form and function a step further by integrating a LED light source to provide a luminaire that is perfect where visually harmonious illumination and energy efficiency are desired. Through an optional Xicato® LED downlight component, Slot 4 LED integrates point-source lighting with general illumination. A regressed lens option provides added dimension to the sleek, slender design. Slot 4 LED is a natural choice for spaces that emphasize basic lines and clean design.

- Features**
- Housing: Nominal 3.5" x 3.5" extruded aluminum housing
 - Finish: White, Black or Silver powdercoat
 - Reflector: Extruded aluminum with high reflectance powdercoat

- Shielding: Extruded 90% transmissive acrylic lens with a textured surface providing diffuse illumination and a uniform appearance. Clear Acrylic dustcover is available for the indirect distribution
- LED Components Linear: Nichia® - 7575 LED chips (>80 CRI)
- Driver: AD LED Driver allows for 0-10V dimming, flicker-free from 2 to 100%. Universal input voltage 120V-277VAC, 50/60Hz. Integrated thermal fold-backmanagement to prevent over heating
- HI LED Driver option allows superior 0 - 10V dimming, flicker-free 100% to off

Listings
CSA Certified to meet U.S. and Canadian standards, and IBEV (Local 3) Union-made in the USA.



ORDERING INFORMATION

Specifications subject to change.

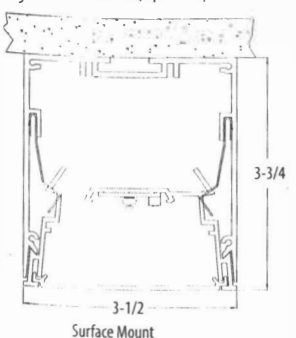
Series	Length	Direct distribution	Lumens	Color temp	Driver	Optics	Downlights ^{2,3}
S4LS Surface mount	2FT 2'	1 Direct Distribution	N Normal Output	30 3000K ≥ 80 CRI	AD Constant current, 0 - 10v, 2% dimming	(blank) No Optics	(blank) Linear LED only
	3FT 3'		H High Output	35 3500K ≥ 80 CRI	HI Constant current, 0 - 10v, 1% dimming to off	WW Wall Washer	L7 10W LEC MR16 (700ml)
	4FT 4'			40 4000K ≥ 80 CRI		WG Wall Graze Distribution	
	5FT 5' L2						
	6FT 6'						
	7FT 7' L1						
	8FT 8'						
	_FT. Specify continuous run length (in whole feet)						

Downlights color temp	Downlight apperture	Voltage	Finish	Controls
(blank) Linear LED only	RD Round	120	WHT White	N100 N100 - nLight without lumen management
27 2700K ≥ 80 CRI	SQ Square	277	BLK Black	N80 N80 - nLight with 80% lumen management
30 3000K ≥ 80 CRI			SLV Silver	N80EMG N80 - nLight 80% lumen management for use with generator supply EM power
35 3500K ≥ 80 CRI				N100EMG N100 - nLight without lumen management for use with generator supply EM power
41 4100K ≥ 80 CRI				OCS ⁴ Integrated Occupancy Sensor/Photocell
				ECO Lutron EcoSystem Interface Module
				NX Dimming, No nLight
				EMPK ⁵ Emergency Battery Pack

ADDITIONAL INFORMATION

For additional product information, visit www.marklighting.com.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions (if provided) are shown in inches unless otherwise noted.



nanderson@ksalighting.com

- Notes**
- Consult factory for 2' length.
 - Downlights are not adjustable and are provided with a solite lens.
 - MR16 modules are supplied at each end of individual unit. For other configurations, consult factory.
 - Occupancy/Photocell sensors are supplied at one end of individual unit. Fixtures with downlights require a remote sensor, location by others
 - Remote mounted; consult factory for remote mounting option.

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fire alarm system design and installation, including all components, wiring, and conduit.
- B. Replacement and removal of existing fire alarm system components, wiring, and conduit indicated.
 - 1. As required for modifications to HVAC systems.
- C. New devices and or modifications required due to renovations and additions.
- D. Existing system in this building is SIMPLEX.

END 28 3100

