

**COUNTY OF McHENRY
McHENRY COUNTY ADMINISTRATION BUILDING
PURCHASING DEPARTMENT – ROOM 200
2200 N. SEMINARY AVENUE
WOODSTOCK, IL 60098**

Sealed bids will be accepted in the above office until

July 7, 2016 at 2:00 P.M. (CST)

For

BID #16-43

***PROVIDE FIRE ALARM UPGRADES at 500
RUSSEL COURT BUILDING***

CONTACT PERSON – DONALD A. GRAY, CPPB
DIRECTOR OF PURCHASING
MCHENRY COUNTY ADMINISTRATION BUILDING
2200 N. SEMINARY AVENUE-- ROOM 200
WOODSTOCK, IL 60098
Phone - (815) 334-4818
Fax - (815) 334-4680

COMPANY

DATE

CONTACT PERSON

ADDRESS

E-MAIL ADDRESS

CITY, STATE AND ZIP

TELEPHONE NO

FAX NO.

TIN (FEIN, or Social Security) NUMBER

The attention of bidders is directed to the McHenry County Purchasing Ordinance, approved August 1, 2014. This Ordinance is incorporated by reference into this bid as if it were contained herein. If you

have not received a copy of the above Ordinance and desire a copy, please contact the office of the Director of Purchasing.

SCOPE OF WORK

The County of McHenry is soliciting pricing to Provide Fire Alarm Upgrades at 500 Russel Court, Woodstock, IL, subject to continuing need and availability of funds. Bid as per specifications contained herein.

A PREBID MEETING and TOUR will be held at the Administration Building, 667 Ware Road, Room 200, Woodstock IL at **11:00am** on **June 16, 2016**. If unable to attend, please call Facilities Management at 815-334-0259 to schedule a tour FOR JUNE 17TH, JUNE 20TH OR JUNE 21ST.

SCHEDULE OF EVENTS

June 9, 2016	Bid Available
June 16 , 2016	Pre-Bid Meeting & Tour, McHenry County Administration Bldg., 667 Ware Rd., Room 200, Woodstock IL at 11:00 AM (CST)
June 17-June 21, 2016	Additional Tour by appointment only ; call 815-334-0259.
June 24, 2016	Vendors Questions Submitted via fax to 815-334-4680 by 4:00 P.M.(CST)
June 30, 2016	Vendors Questions Answered via fax and Posted on Website by 4:00 P.M.(CST)
July 7, 2016	Bid due in Purchasing at 2:00 P.M.(CST)

PAYMENT

Payment will be processed after receipt of delivery invoice and appropriate affidavit.

NON-DISCRIMINATION

Contractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., as amended and any rules and regulations promulgated in accordance therewith, including, but not limited to the Equal Employment Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix A), 775 ILCS 5/1-102, which is incorporated herein by reference, and constituting of a written EEO Policy and a workforce profile that demonstrates its EEO practices. Furthermore, the Contractor shall comply the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq., as amended. The Contractor must have a written sexual harassment policy which meets Illinois State Statutes, 775 ILCS, 15/3.

PREVAILING WAGE

The State of Illinois requires that all wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended. This requires payment of the general prevailing rate for each craft or type of worker, including payment of the general prevailing rate for legal holiday and overtime work. The Illinois Department of Labor publishes the prevailing wage rates on its website at www.state.il.us/agency/idol/rates.htm. The Contractor shall review the wage rates applicable to the work of the contract at regular intervals in order to ensure the timely payment of current wage rates. The Contractor agrees that no additional notice is required. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. A copy of the prevailing wage rates is posted on the McHenry County website at www.co.mchenry.il.us under BIDS and RFP's. If wage rates change during the course of the

project, the new rates will be available in the County of McHenry Purchasing Office. Vendors may access the Illinois Department of Labor website for updates www.state.il.us/agency/idol.

CERTIFIED PAYROLL REQUIREMENTS (Public Act 94-0515)

Effective August 10, 2005 contractors and subcontractors on public works projects must submit certified payroll records on a monthly basis to the public body in charge of the construction project, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing records he or she knows to be false is a Class B misdemeanor.

The certified payroll records must include for every worker employed on the public works project the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, number of hours worked each day, and starting and ending time of work each day. These certified payroll records are considered public records and public bodies must make these records available to the public under the Freedom of Information Act, with the exception of the employee's address, telephone number and social security number. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B misdemeanor.

INCREASED PENALTIES FOR PREVAILING WAGE VIOLATIONS (Public Act 94-0488)

Effective January 1, 2006, penalties for violations of the Prevailing Wage Act will increase from 20% to 50% of the underpaid amounts for second or subsequent violations. An additional penalty of 5% of the underpayment penalty must be paid to workers for each month the wages remain unpaid (up from the current 2% penalty).

For violations that occur after January 1, 2006, the debarment period --during which contractors are ineligible for public works contracts -increases from 2 years to 4 years if two notices of violation are issued/serious violations occur within a 5-year period. In addition, a new monetary penalty of \$5,000 may be assessed against contractors who retaliate against employees who report violations or file complaints under the Prevailing Wage Act.

SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

The successful bidder must be in compliance with State of Illinois HB-1855 (Public Act 095-0635), which amends the Prevailing Wage Act. Before an employer commences work on a public works project, the employer shall have in place a written program which meets or exceeds the program requirements in this Act, to be filed with the public body engaged in the construction of the public works and made available to the general public, for the prevention of substance abuse among its employees. The testing must be performed by a laboratory that is certified for Federal Workplace Drug Testing Programs by the Substance Abuse and Mental Health Service Administration of the U.S. Department of Health and Human Services.

PROCUREMENT OF GREEN PRODUCTS AND TECHNOLOGIES

As approved by the McHenry County Board in April 2008, it is in the interest of public health, safety and welfare and the conservation of energy and natural resources to use and promote environmentally responsible products. The County should strive to influence private purchases through the example of using government specifications and standards that are green or environmentally friendly when making its purchases.

Whenever available and cost-justified, the County should purchase those materials including the purchase of recycled products containing post-consumer materials rather than residual materials resulting from the processing or manufacturing from another product. To the extent practicable, all

products standards shall emphasize functional or performance criteria which do not discriminate against the use of recycled materials.

McHenry County should cooperate to the greatest extent feasible with other governments and organizations to develop a comprehensive, consistent and effective procurement effort intended to stimulate the market for recycled products, reusable products, products designed to be recycled, and other environmentally responsible products.

McHenry County shall continue to participate in and shall encourage other public jurisdictions to participate with the County in the purchase of products containing recycled content. Participation in such cooperative systems shall be aimed at obtaining maximum practical recycled content in County purchases, to obtain best available price for products with recycled content, to facilitate or encourage lower prices industry-wide and to encourage development of industries and markets dealing with recycled content products.

PROCUREMENT OF PRODUCTS THAT ARE ENERGY STAR QUALIFIED

McHenry County shall select, where life cycle and cost-effective, ENERGY STAR and other energy efficient products, when acquiring energy-using products. This information will be required by the bidder in their bid submittal.

SECURITY

The contractor represents and warrants to the County of McHenry that neither it nor any of its principals, shareholders, members, partners or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Contractor further represents and warrants to the County of McHenry that the Contractor and its principals, shareholders, members, partners, or affiliates, as applicable, are not directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as Specially Designated National and Blocked Person. The Contractor hereby agrees to defend, indemnify and hold harmless the County of McHenry, the Corporate Authorities, and all County of McHenry elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the foregoing representation and warranties.

PURCHASE EXTENSION

This contract shall be offered for purchases to be made by other counties and governmental units within the State of Illinois as authorized by the Government Joint Purchasing Act. All purchases and payments made under this authority shall be made directly by the governmental unit to the Vendor. The County of McHenry shall not be responsible in any way for such purchase orders or payments. All terms and conditions of this contract shall apply to all orders placed by another governmental unit.

ADDENDUM

Should the Vendor require any additional information about this Bid, please fax to Purchasing (815-334-4680) any questions by the deadline as outlined in the schedule of events. ANY AND ALL changes to these specifications are valid only if they are included by Written Addendum to All Bidders. NO interpretation of the meaning of the plans, specifications, or other contract documents will be made orally. If required, all addenda will be faxed to bidder if a Notice of Intent to Bid has been completed and faxed to the Purchasing Office. In addition, all addenda are posted on the County of McHenry's website. Failure of the bidder to receive any such addendum or interpretation shall not relieve the bidder from obligation under this Bid as submitted. All addenda so issued shall

become part of the bid documents. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused by a bidder to improperly submit a bid.

Response to these questions will be made by means of an addendum. Only the Director of Purchasing has the authority to issue an addendum.

Addenda are written instruments issued by the County prior to the date for receipt of proposals, which modify or interpret the Bid by addition, deletions, clarifications or corrections.

Prior to the receipt of bids, addenda will be faxed or delivered to all who are known to have received a Notice to Bid. Each vendor shall ascertain prior to submitting a bid that all addenda issued have been received and, by submission of a bid, such act shall be taken to mean that such vendor has received all addenda and that the vendor is familiar with the terms thereof and understands fully the contents of the addenda.

TAXES

The County of McHenry is exempt from paying Illinois Use Tax, Illinois Retailers Occupation Tax and Federal Excise Tax. The bidder's attention is directed to the McHenry County Purchasing Ordinance {S3-10, (9), (10), and (11)}.

INSURANCE

(1) GENERAL

The successful bidder shall maintain for the duration of the contract and any extensions thereof, at bidder's expense, insurance that includes "Occurrence" basis wording and is issued by a company or companies qualified to do business in the State of Illinois that are acceptable to the County, which generally requires that the company(ies) be assigned a Best's Rating of A or higher with a Best's financial size category of Class XIV or higher, in the following types and amounts:

- (a) Commercial General Liability in a broad form, to include, but not limited to, coverage for the following where exposure exists: Bodily Injury and Property Damage, Premises/Operations, Independent contractors, Products/Completed Operations, Personal Injury and Contractual Liability; limits of liability not less than:

\$1,000,000 per occurrence and \$2,000,000 in the aggregate;

- (b) Business Auto Liability to include, but not be limited to, coverage for the following where exposure exists: Owned Vehicles, Hired and Non-Owned Vehicles and Employee Non-Ownership; limits of liability not less than:

\$1,000,000 per occurrence, combined single limit for:
Bodily Injury Liability and Property Damage Liability;

- (c) Workers' Compensation Insurance to cover all employees and meet statutory limits in compliance with applicable state and federal laws. The coverage must also include Employer's Liability with minimum limits of \$100,000 for each incident.

(2) EVIDENCE OF INSURANCE

The successful bidder agrees that with respect to the above required insurance that:

- (a) The County of McHenry shall be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of the contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies;
- (b) The contractual liability arising out of the contract shall be acknowledged on the Certificate of Insurance by the insurance company;
- (c) The County of McHenry shall be provided with thirty (30) days prior notice, in writing, of Notice of Cancellation or material change and said notification requirement shall be stated on the Certificate of Insurance;
- (d) Subcontractors, if any, comply with the same insurance requirements. In addition to being named as an additional insured on the Certificate of Insurance, each liability policy shall contain an endorsement naming the County of McHenry as an additional insured. A copy of the endorsement shall be provided to McHenry County along with the Certificate of Insurance; and
- (e) have McHenry County named as an additional insured and the address for certificate holder must read exactly as:

County of McHenry, **a body politic**
2200 N. Seminary Avenue
Woodstock, IL 60098

- (e) Insurance Notices and Certificates of Insurance shall be provided to:

McHenry County, Purchasing Department
2200 N. Seminary Avenue, Room 200
Woodstock, Illinois 60098

HOLD HARMLESS CLAUSE

The successful bidder will agree to indemnify, save harmless and defend the County of McHenry, its agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of or in connection with the work covered by this contract upon award. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County of McHenry, its agents, servants, or employees or any other person indemnified hereunder.

BID RESPONSE

It is highly recommended that the vendor completely read the bid prior to filling out to become acquainted with terms and conditions of the bid document and merchandise requirements. No relief will be allowed from the bid conditions unless you take written exception to that condition on your bid.

BIDS MUST BE SUBMITTED IN DUPLICATE FORM, (One Original, and One Copy). BIDS ARE DUE BACK BY 2:00 P.M. (CST) ON JULY 7, 2016.

Bidders are urged to respond to this bid request in every case to insure being maintained on current bid lists. Explanations of the reasons for not bidding will assist in maintaining the bidder on the correct bid list(s).

SUBMITTAL

Submit one (1) bid, multiple bids will not be accepted.

GENERAL CONDITIONS

This bid shall be firm for at least 120 days after the latest time specified for submission for bids and thereafter until written notice is received from the bidder.

AWARD OF ORDER

The County will award a purchase order to the lowest responsive, responsible bidder meeting the County's requirements as listed in this document. The County will be the sole judge of acceptability of any products offered.

WORKMANSHIP

Items shall be manufactured according to the highest traditions of the industry and shall meet all commercial standards of quality. The County shall be the sole judge of acceptable products. Unacceptable products will be rejected and suitable price adjustments made.

MISCELLANEOUS

It is the bidder's task to be familiar with the referenced items and to offer only products of equal or greater quality. Any questions on specifications should be directed to the Purchasing Department.

EXCEPTIONS

The bid speaks for itself. Bidders taking exception to any terms, conditions or specifications of this bid must clearly state in writing such exception(s) either on or with their bid. The County will be the sole judge of the acceptability of any exception noted, and is not bound to consider any bid submitted with exceptions.

ALTERNATES

Trade names are used solely for the purpose of setting minimum standards of quality and performance and are not to be construed as exclusionary. Bidders are encouraged to contact the Purchasing Department prior to the bid opening for the purpose of clarifying specifications.

FULL PRICING AND CONTINGENCIES

The County shall hold the successful bidder to bid pricing. Additional charges for contingencies discovered by the vendor at any time after the date of opening of this bid will not be considered for payment by the County.

RECOURSE FOR UNSATISFACTORY MATERIALS

Payment shall be contingent upon the County's inspection of and satisfaction with completed work. Any defective work or materials, non-conformance to bid specifications, damaged materials, or unsatisfactory installation shall be corrected to the County's satisfaction by the successful bidder at no additional charge.

TERMINATION

Failure to comply with the terms and conditions as herein stated shall be cause for cancellation of the contract. The County will give written notice of unsatisfactory performance and the contractor will be allowed thirty (30) days to take corrective action and accomplish satisfactory control. If at the end of the thirty days, the County deems the contractor's performance still unsatisfactory, the contract shall be canceled. The exercise of its right of cancellations shall not limit the County's right to seek any other remedies allowed by law.

The successful bidder will agree that the resulting contract is made subject to available budgetary appropriations and shall not create any obligation on behalf of the County in excess of such appropriations. In the event that no funds or insufficient funds are appropriated and budgeted, this Contract shall terminate without penalty or expense to the County thirty (30) days after written notification of termination from the County.

The successful bidder will agree that pursuant to requirements imposed under Illinois law, the County shall have 120 days after each election of county board members to terminate this Agreement, without cause and without penalty.

CHOICE OF LAW AND VENUE

The bidder agrees that this bid has been executed and delivered in Illinois and that their relationship and any and all disputes, controversies or claims arising under this bid or any resulting contract shall be governed by the laws of the State of Illinois, without regard to conflicts of laws principles. The bidder further agrees that the exclusive venue for all such disputes shall be the Circuit Court of the 22nd Judicial Circuit of McHenry County, Illinois, and the bidder hereby consent to the personal jurisdiction thereof.

COMPLIANCE WITH LAWS

The bidder hereto covenants and agrees to comply with all applicable federal, state, and local laws, codes, ordinances, rules and regulations. Failure to comply with the terms of this provision shall constitute a breach of contract and permit the County to terminate this (Request for Sealed Proposal/Bid) in accordance with the termination provisions stated herein.

REJECTION OF BIDS, WAIVER OF IRREGULARITIES

McHenry County reserves the right to reject any or all bids, to waive irregularities, and to accept that bid which is considered to be in the best interest of the County. Any such decision shall be considered final.

PROTEST PROCEDURES

Any Bidder who believes contractual terms or specifications are unnecessarily restrictive or limit competition may submit a protest, in writing, to the Director of Purchasing. To be considered, the protest must be received by McHenry County five (5) days prior to the stated bid opening. Any adversely affected or aggrieved Bidder shall have ten (10) days from the date of the bid opening to file a written protest regarding the intent to award the bid. Protests submitted after that date will not be

accepted. Protests must specify the grounds upon which the protest is based (refer to appropriate statute, rule, code, or ordinance which defines the protest process).

BIDDER'S ATTACHMENT TO THE BID

Any attachment to this bid, as required by the bid conditions, or made at the bidder's option, must reference on their face the bid title, opening date, and time.

DELIVERY

Delivery will be considered in making the award and the bidders shall state, in the spaces provided, expected delivery after receipt of Purchase Order. Failure to meet said delivery promises without prior consent of the Director of Purchasing will be considered a breach of faith.

PERFORMANCE AND PAYMENT BOND:

A Performance and Payment Bond will be required by the accepted bidder as described below if the bid amount exceeds \$50,000.00.

- Payment and Performance Bond shall be in the amount of 110% of the bid value. Any additional scope value during the project must be covered by the bonds.
- Obligee is County of McHenry, project owner for the Payment and Performance Bonds.
- Payment and Performance Bonds must be signed by an official of the bonding company and accompanied by the bonding agent's written Power of Attorney.
- Provide three (3) copies of each of the bonds and the Power of Attorney in order that one copy of each may be attached to each copy of the contract agreement. Bonds must be submitted to McHenry County within two (2) weeks of the notice of award, if start of construction is sooner, then bonds must be submitted a minimum of two (2) days prior.
- Date of Agreement and Payment and Performance Bonds shall be the same.
- Such Payment and Performance Bonds shall be issued by a surety listed on the Department of Treasury's listing as approved sureties (Department Circular 570) with an A.M. Best Rating of "A" or better which is licensed in the state of the location of the project and must be acceptable to the design-builder.

BID BOND:

Each separate bid shall be accompanied by a bid bond, certified check, or a cashier's check, drawn on a bank authorized to do business in Illinois, in a dollar amount of not less than five percent (5%) of the sum of the computed total amount of the bid or five hundred dollars (\$500), whichever is greater.

FREIGHT

Freight is all inclusive unless otherwise stated.

FUEL SURCHARGE

The County of McHenry does NOT accept any fuel surcharges.

***** NOTE THIS BID REQUIRES PREVAILING WAGES. PLEASE VISIT THE IDOL WEBSITE FOR INSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE AWARDED VENDOR TO SUBMIT CERTIFIED PAYROLLS TO THE COUNTY *****

SPECIFICATIONS

Please refer to the following Project Manual and Drawings:

Note: This Bid REQUIRES A BID and PERFORMANCE BOND.

PROJECT MANUAL

May 20, 2016

McHenry County Government

Fire Alarm Upgrades

at

500 Russel Court Building
Woodstock, IL 60098

ARCHITECT

CBJ Architects P.C.

3521 Wintergreen Ter.
Algonquin, IL 60102

CONSULTING ENGINEER

RTM Engineering Consultants

3 Executive Ct., Unit 4
South Barrington, IL 60010

INDEX OF SECTIONS

BID FORM

00 4100 BID FORM

SUMMARY

01 1000 SUMMARY

PRICE AND PAYMENT PROCEDURES

01 2000 PRICE AND PAYMENT PROCEDURES
01 2200 UNIT PRICES
01 2300 ALTERNATES

ADMINISTRATIVE REQUIREMENTS

01 3000 ADMINISTRATIVE REQUIREMENTS
01 3216 CONSTRUCTION PROGRESS SCHEDULE
01 3553 SECURITY PROCEDURES
01 3600 SAFETY REQUIREMENTS

QUALITY REQUIREMENTS

01 4000 QUALITY REQUIREMENTS

TEMPORARY FACILITIES AND CONTROLS

01 5000 TEMPORARY FACILITIES AND CONTROLS
01 5300 TEMPORARY CONSTRUCTION AND AIDS
01 5500 VEHICULAR ACCESS AND PARKING
01 5721 INDOOR AIR QUALITY CONTROLS

PRODUCT REQUIREMENTS

01 6000 PRODUCT REQUIREMENTS

EXECUTION AND CLOSEOUT REQUIREMENTS

01 7000 EXECUTION AND CLOSEOUT REQUIREMENTS
01 7419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
01 7800 CLOSEOUT SUBMITTALS
01 7900 DEMONSTRATION AND TRAINING

DIVISION 2 - SITE CONSTRUCTION

02 2250 DEMOLITION

DIVISION 9 - FINISHES

09 5110 SUSPENDED ACOUSTICAL CEILINGS

SECTION 00 4100 - BID FORM

NAME & ADDRESS OF COMPANY SUBMITTING BIDS:

Company: _____
Street Address: _____
P.O. Box: _____
City, State, Zip: _____
Contact Person: _____
Phone No.: _____
Fax No.: _____
Email Address: _____

**For: McHenry County Government Center
500 Russel Court Fire Alarm Upgrades**

TO: McHenry County Purchasing Department- Suite 200
Woodstock , Illinois

SEALED BIDS DUE: REFER TO MC HENRY COUNTY BID DOCUMENT

Pursuant to and in compliance with the Invitation to Bid and the proposed contract documents entitled McHenry County Government 500 Russel Court Projects including Addenda _____, the undersigned, having become thoroughly familiar with the terms and conditions of the proposed contract documents and with local conditions affecting the performance and costs of the work at the place where the work is to be completed, having fully inspected the site in all particulars, hereby proposes and agrees to fully perform the work within the period as described in the Preliminary Project Construction Schedule and in strict accordance with the proposed contract documents, including furnishing of any and all labor and materials, and to do all of the work required to construct and complete said work in accordance with the contract documents, for the following dollar amounts:

BID AND PERFORMANCE BOND: REFER TO MC HENRY COUNTY BID DOCUMENT

Provide an Itemized Bid Breakdown.

The total Bid Amount should equal the breakdown for the projects listed.

PROJECT #15-017: McHenry County, 500 Russel Court, Fire Alarm Upgrades, base bid

BID AMOUNT FOR PROJECT #15-017: _____

ALTERNATE #1: _____

ALTERNATE #2: _____

TOTAL BID AMOUNT FOR ALL PROJECTS: _____

ALTERNATES: The following is for Voluntary Alternates only.

Voluntary Alternate No. 1: Sections _____ Add / Deduct _____

Description

Voluntary Alternate No. 2: Sections _____ Add / Deduct _____

Description

Voluntary Alternate No. 3: Sections _____ Add / Deduct _____

Description

Voluntary Alternate No. 4: Sections _____ Add / Deduct _____

Description

SUGGESTIONS FOR COST REDUCTIONS:

SCHEDULE OF UNIT PRICES: (Refer to Section 01 2200 and applicable specification sections)

All "Unit Costs" must be filled out. No split cost will be accepted for adds vs. deducts. The same number will be used for both for any changes during the project.

<u>SECTION</u>	<u>UNIT DESCRIPTION</u>	<u>UNIT PRICE</u>
095100 Acoustical Ceilings	Per S.F. of Acoustical Ceiling Tile only (install new and remove old).	\$ _____

The bidder has reviewed the project insurance requirements set forth in these documents (section 002113). If awarded a subcontract for this Work, insurance will be provided as specified herein.

INITIAL HERE: _____

Incidental items not specifically mentioned in the project description shall be included in the schedule of unit prices and the lump sum bid price to ensure a complete project in accordance with and meeting the intent of the plans and specifications.

By signing, the Contractor understands that the Owner reserves the right to wave or reject any informalities or irregularities regarding received bids, but that the bid shall remain open and shall not be withdrawn for a period of ninety days from the date prescribed for its opening. If written notice of the acceptance of this bid is mailed or delivered to the undersigned within ninety days after the date set for the opening of this bid, or at any other time thereafter before it is withdrawn, the undersigned will execute and deliver the contract documents to Prime Hoffman LLC in accordance with this bid as accepted, and will also furnish and deliver to Prime Hoffman LLC proofs of insurance coverage, and bonds as indicated, all within five days after personal delivery or after deposit in the mails of the notification of acceptance of this bid.

Notice of acceptance, or request for additional information, will be addressed to the undersigned at the address set forth on page one of this bid form.

Signature: _____

Printed Name & Title: _____

Proposal Date: _____

Contact Person: _____

SECTION 01 1000

SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: McHenry County Government 500 Russel Ct., Fire Alarm Upgrades.
- B. Owner's Name: McHenry County Government.
- C. Architect's Name: CBJ Architects P.C..
- D. The Project consists of the upgrades to an existing Fire Alarm system as provided in the Contract Documents.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described on the Bid Form.

1.03 OWNER OCCUPANCY

- A. McHenry County Workforce Network Board intends to occupy adjacent areas during the construction of the project.
- B. Cooperate with McHenry County to minimize conflict and to facilitate McHenry County's operations.
- C. Schedule the Work to accommodate McHenry County Workforce Network Board occupancy.

1.04 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: All use of site and Owner premises must be coordinated and approved the Owner.
- B. Arrange use of site and premises to allow:
 - 1. McHenry County Workforce Network Board occupancy.
 - 2. Work by Others.
- C. Provide access to and from site as required by law and by McHenry County: workers must enter from east door and park in the south east portion of the parking lot only unless directed differently by the Owner.
- D. Emergency Building Exits during Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
- E. Existing building spaces may not be used for storage. Follow security measures enforced by the Sheriff's Department.
- F. Limit disruption of utility services to hours the building is unoccupied.

1.05 WORK SEQUENCE

- A. Coordinate construction schedule and operations with McHenry County and CBJ Architects P.C..

1.06 SPECIFICATION SECTIONS APPLICABLE TO ALL CONTRACTS

- A. This document identifies proposed Bid Categories. It is intended to clarify the scope of work to be included in each proposed Bid Category and is a part of the Contract Documents.
- B. Unless otherwise noted, all provisions of the sections listed below apply to all subcontracts. Specific items of work listed under individual Bid Category descriptions constitute exceptions.
 - 1. Section 01 2000 (01200) - Price and Payment Procedures.
- C. Bid Categories shall include all provisions of work indicated in the specifications sections listed within the Bid Section and shall apply to said category unless otherwise noted on the following pages.

D. Bid Categories shall include all keyed notes and items of work indicated on the drawings that are associated with the specification sections included in the bid category unless otherwise noted on the following pages.

1.07 PROPOSED BID CATEGORIES WITH INCLUDED ADDITIONAL ITEMS AND EXCLUSIONS ARE INDICATED ON THE FOLLOWING PAGES. Section 00410.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2000

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Schedule of values.
- B. Applications for Progress Payments
- C. Modification procedures.
- D. Application for final payment.

1.02 RELATED REQUIREMENTS

1.03 SCHEDULE OF VALUES

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to CBJ Architects P.C. for approval.
- B. Forms filled out by hand will not be accepted.
- C. Submit a printed schedule on AIA G703 or equivalent. Contractor's standard form or electronic media printout will be considered.
- D. Submit Schedule of Values at least 15 days before the first Application for Payment request.
- E. Format and Content: Use AIA G703 or equivalent as the format for the Schedule of Values. Arrange the Schedule in the columns to indicate the following for each item:
 - 1. Column A: Chronological line numbering
 - 2. Column B: Description of Contract Work, broken down on each line for labor, materials, or phases of work (i.e. - Carpentry, Vinyl Base, Resilient Flooring).
 - 3. Column C: Schedule of Value, dollar amount of cost associated with description of work.
 - a. Break down Contract Sum in enough detail to facilitate evaluation of Application for Payment.
 - b. Break Contract amounts down into several line items.
- F. Include within each line item, the amount of Allowances specified in this section.
- G. Include within each line item, a direct proportional amount of Contractor's overhead and profit.
- H. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Application Times: On or before the 30th day of each month the Contractor shall submit to CBJ Architects P.C., one copy of a payment request covering work completed during the preceding one-month period. Payment applications received after the cut-off date will be held until the following month. Each Application for Payment shall be consistent with previous applications and payments as certified by CBJ Architects P.C.
- B. The following month, CBJ Architects P.C. will review the payment request, certify acceptable amounts, and submit an Application for Payment to the Owner on or about the 10th. Prior to release of monthly progress payments, all lien waivers, outstanding change orders, closeout materials and insurance must be in place.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to CBJ Architects P.C. for approval.
- D. Forms filled out by hand will not be accepted.
- E. Present required information in typewritten form.

- F. Form: AIA G702, G703 Application and Certificate for Payment documents.
- G. Execute certification by signature of authorized officer.
- H. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored Products.
- I. List each fully executed Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Contract Work.
- J. Submit one copy of each Application for Payment.

1.05 MODIFICATION PROCEDURES

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or Contractors of changes to the Contract Work.
- B. For minor changes not involving an adjustment to the Contract Price or Contract Time, CBJ Architects P.C. will issue instructions directly to Contractor.
- C. All contract adjustments must be executed in writing. Change order requests will only be processed for the following:
 - 1. It relates to a Construction Bulletin (CB) issued by CBJ Architects P.C.
 - 2. It relates to a Request for Pricing (RFP) issued by CBJ Architects P.C.
 - 3. It relates to an Extra Work Authorization (EWA) issued by CBJ Architects P.C.
 - 4. Prior to actual work being implemented, Contractor follows item F below.
- D. Construction Bulletins: CBJ Architects P.C. may issue a document, instructing the Contractor to proceed with a change in the Contract Work, for subsequent inclusion in a Change Order.
 - 1. The document will describe changes in the Contract Work, and will designate method of determining any change in Contract Sum.
 - 2. Promptly execute the change in Work. Contractor to respond by the date indicated with a fixed price quotation. CBJ Architects P.C. will review the price quotation and notify Contractor accordingly.
- E. Extra Work Authorizations: CBJ Architects P.C. may issue an Extra Work Authorization document, signed by the Field Project Manager or the McHenry County, instructing Contractor to proceed with a change in the Work, for subsequent review and approval for inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- F. Request for Pricing: CBJ Architects P.C. may issue a document which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation by date indicated.
- G. The Contractor may propose a change by submitting a request for change to CBJ Architects P.C., describing the proposed change and its full effect on the Contract Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 6000 (01600).
- H. Computation of Change in Contract Amount:
 - 1. For change requested by CBJ Architects P.C. for work falling under a fixed price contract, the amount will be based on Contractor's price quotation as approved by CBJ Architects P.C.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by CBJ Architects P.C.
 - 3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.

4. For change ordered by CBJ Architects P.C. without a quotation from the Contractor, the amount will be determined by CBJ Architects P.C. based on the Contractor's substantiation of costs as specified for Time and Material work. All work must be documented on CBJ Architects P.C. EWA form and signed by a representative of the General Contractor and CBJ Architects P.C. .
- I. Substantiation of Costs: Provide full information required for evaluation.
 1. On request, Contractor/Supplier shall provide following data:
 - a. Quantities of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit not to exceed 10% for work performed by Contractor, and 5% for Contracted work.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and Contracts, similarly documented.
 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Contract.
 - J. Execution of Change Orders: The General Contractor will issue Change Orders for signatures of parties as provided in the Contract on.
 - K. After execution of Change Order, Contractor shall promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
 - L. Contractor shall promptly revise progress schedules with the Owner and CBJ Architects P.C. Field Project Manager to reflect any change in Contract Time, to allow for other items of work affected by the change.
 - M. Contractor shall promptly enter changes in Project Record Documents.

1.06 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 1. All closeout procedures specified in Sections 017000 and 017800.
 2. Contractor compliance with Wage Determination Rates, if applicable.
 3. Consent of Surety to Final Payment, if applicable.
 4. Satisfaction of Contract Requirements for final payment.

END OF SECTION

SECTION 01 2200

UNIT PRICES

PART 1 GENERAL

1.01 SECTION INCLUDE

- A. This section specifies administrative and procedural requirements for unit prices.
- B. Measurement and payment criteria applicable to Contract Work performed under a unit price payment method.
- C. Defect assessment and non-payment for rejected work.

1.02 COSTS INCLUDED

- A. A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services, in place, that will be added to or deducted from the Contract Amount by Change Order if estimated quantities of Work required by Contract Documents are increased or decreased.
- B. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Contract Work; overhead and profit.

1.03 UNIT QUANTITIES SPECIFIED

- A. Quantities indicated in the Bid Form are for bidding and Contract purposes only. Quantities and measurements of actual Contract Work will determine the payment amount.

1.04 MEASUREMENT OF QUANTITIES

- A. Take all measurements and compute quantities. Measurements and quantities will be verified by CBJ Architects P.C.
- B. The Owner and CBJ Architects P.C. reserve the right to reject the Contractor's measurement of Work-in place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.
- D. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
- E. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- F. Measurement by Area: Measured by square dimension using mean length and width or radius.
- G. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
- H. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work in place.

1.05 PAYMENT

- A. Payment for Contract Work governed by unit prices will be made on the basis of the actual measurements and quantities of Contract Work which is incorporated in or made necessary by the Contract Work and accepted by the CBJ Architects P.C., multiplied by the unit sum/price.
- B. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.

3. Products not completely unloaded from the transporting vehicle.
4. Products placed beyond the lines and levels of the required Contract Work.
5. Products remaining on hand after completion of the Contract Work.
6. Loading, hauling, and disposing of rejected Products.

1.06 DEFECT ASSESSMENT

- A. Replace Contract Work, or portions of the Contract Work, not conforming to specified requirements.
- B. If, in the opinion of CBJ Architects P.C., it is not practical to remove and replace the Contract Work, CBJ Architects P.C. will direct one of the following remedies:
 1. The defective Contract Work may remain, but the unit sum/price will be adjusted to a new unit price at the discretion of CBJ Architects P.C.
 2. The defective Contract Work will be partially repaired to the instructions of CBJ Architects P.C., and the unit sum/price will be adjusted to a new unit price at the discretion of CBJ Architects P.C..
- C. The authority of CBJ Architects P.C. to assess the defect and identify payment adjustment is final.

END OF SECTION

SECTION 01 2300

ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Alternate submission procedures.
- B. Documentation of changes to Contract Price and Contract Time.

1.02 RELATED REQUIREMENTS

- A. McHenry County Purchasing Document, Bid form, qualifications of bidder.

1.03 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option. Accepted alternates will be identified in the Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each alternate.
- C. Immediately following Contract award, prepare and distribute to each party involved, notification of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for consideration at a later date. Include a complete description of negotiated modifications to alternates.
- D. A schedule of Alternates follows. Affected contracts or purchase orders, referenced in the listing contain requirements for materials and methods necessary to achieve the Work described under each alternate.
- E. Alternates may be used to calculate total bid for the project. Based on discussions and direction with McHenry County the final bid total may be cumulative of the base bid and any selected alternates.
- F. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the alternate.

END OF SECTION

SECTION 01 3000

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Submittals for review, information, and project closeout.
- E. Number of copies of submittals.
- F. Submittal procedures.
- G. Action Approval

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary.
- B. Section 01 3216 - Construction Progress Schedule: Includes phasing of construction.
- C. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 PROJECT COORDINATION

- A. General Contractor: Office Procedures: Project Manager: Field Superintendent: Field Project Manager.
- B. Cooperate with McHenry County in allocation of mobilization areas of site; for field offices and sheds, for access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through McHenry County.
- D. Comply with CBJ Architects P.C. and McHenry County's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of McHenry County for use of temporary utilities and construction facilities.
- F. The General Contractor shall coordinate field engineering and layout work.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- 1. NOT USED

3.02 PROGRESS MEETINGS

- A. The General Contractor will schedule and administer meetings throughout progress of the Work at bi-weekly intervals.
- B. The General Contractor will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Field Project Manager, major on site Contractors and suppliers, McHenry County, CBJ Architects P.C., as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems that impede, or will impede, planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of off-site fabrication and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Maintenance of quality and work standards.
 - 11. Effect of proposed changes on progress schedule and coordination.
 - 12. Security Issues/Concerns
 - 13. Other business relating to Work.
- E. Representative of each firm attending must have authority to bind company for decisions made.

3.03 CONSTRUCTION PROGRESS SCHEDULE - See Section 01 3216

3.04 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.
- B. Submit to CBJ Architects P.C. for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetics, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES per section 01 6000. Article below and for record documents purposes described in Section 01 7800 - CLOSEOUT SUBMITTALS.

3.05 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.

2. Certificates.
 3. Test reports.

 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
 7. Other types indicated.
- B. Submit for CBJ Architects P.C.'s knowledge as contract administrator or for McHenry County. No action will be taken.

3.06 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
1. Project record documents.
 2. Operation and maintenance data.
 3. Warranties.
 4. Other documents as may be required by the Contract documents.
- B. Submit to CBJ Architects P.C. for the McHenry County's benefit during and after project completion.

3.07 NUMBER OF COPIES OF SUBMITTALS

- A. Documents for Review:
1. Small Size Sheets, Not Larger than 8-1/2 x 11 inches: Submit in PDF electronic format.
 2. Larger Sheets, Not Larger than 30 x 42 inches: Submit in PDF electronic format.
- B. Documents for Information: Submit in PDF electronic format.
- C. Documents for Project Closeout: Submit in PDF electronic format.
- D. Samples: Submit the number specified in individual specification sections; one of which will be retained by CBJ Architects P.C..
1. Clearly label each sample stating; material, type, color, thickness, size, specification section number, and CBJ Architects P.C. project number.
 2. Retained samples will not be returned to Contractor unless specifically stated.

3.08 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Contractors cover letter of transmittal.
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify CBJ Architects P.C. Project Number, Contractor, Contractor or supplier; and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Contract Work and Contract Documents.
- E. Deliver submittals to CBJ Architects P.C. at business address.
- F. Deliver submittals to CBJ Architects P.C. no later than fifteen (15) working days after Contract award, if not required earlier.
- G. Schedule submittals to expedite the Project, and coordinate submission of related items.
- H. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- I. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Contract Work.
- J. Provide space for Contractor review stamp.

- K. When revised for resubmission, identify all changes made since previous submission.
- L. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- M. Submittals not requested will not be recognized or processed.

3.09 APPROVAL ACTION

- A. Action of any kind by Design-Builder is only for conformance with the design concept of the work and with the information given in the Contract Documents. This action shall not relieve the Contractor of responsibility for errors, omissions or any deviation from the requirements of the Contract Documents. The Contractor shall be responsible for verifying and correlating all quantities and dimensions, selecting fabrication process or techniques of assembly and performing his work in a safe and satisfactory manner.
- B. APPROVED; indicates that the shop drawings were reviewed and found to be in conformance with the design concept and the Contract Documents, and that the Contractor may proceed with fabrication and/or installation of the work detailed on the drawing. No shop drawing or work shown thereon will be considered released for construction until it has CBJ Architects P.C. approval.
- C. APPROVED AS NOTED; indicates that the shop drawings were reviewed and found not in conformance with design concept and the Contract Documents; required corrections have been so noted on the drawing. Shop drawings marked "Approved as Noted" give authority to proceed in accordance with notes; corrected copies may be requested by CBJ Architects P.C. for final approval only if the mark-up was extensive.
- D. NOT APPROVED - RESUBMIT; indicates that the shop drawings were reviewed and found to be in substantial disagreement with the design concept and the Contract Documents; drawings so stamped shall be resubmitted for CBJ Architects P.C. approval before any work shown thereon may be started.
- E. SUPPLEMENTAL REFERENCE; indicates that shop drawings provide information that is incidental to design concept and the Contract Documents; Contractor may proceed at his discretion.

END OF SECTION

SECTION 01 3216

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Review and Evaluation of Schedule.
- B. Distribution of Schedule.

1.02 RELATED SECTIONS

- A. Section 01100 - Summary

1.03 SUBMITTALS

1.04 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- B. Diagram Sheet Size: 30 x 42 inches or width required. Submit in PDF electronic format.
- C. Sheet Size: Multiples of 8-1/2 x 11 inches. Submit in PDF electronic format.

PART 2 PRODUCTS

2.01 SCHEDULE SOFTWARE COMPATABILITY

- A. Required; Microsoft Project or other as accepted by McHenry County.

PART 3 EXECUTION

3.01 PRELIMINARY MILESTONE SCHEDULE

- A. REFER TO MC HENRY COUNTY BID DOCUMENT

3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- D. Provide legend for symbols and abbreviations used.

3.03 BAR CHARTS

- A. Identify the first work day of each week.

3.04 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each

activity.

- C. Update diagrams to graphically depict current status of Contract Work.
- D. Identify activities modified since previous submittal, major changes in Contract Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.

3.05 DISTRIBUTION OF SCHEDULE

- A. The General Contractor shall distribute updated project schedules at bi-weekly project meetings.
- B. Recipients shall promptly report, in writing, problems anticipated by projections shown in schedules.

END OF SECTION

SECTION 01 3553

SECURITY PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Security measures including formal security program, entry control, and personnel identification.
- B. All contractor's personnel will be subject to a back ground check by McHenry County Sheriff's Department. Any individuals identified as not acceptable to the Sheriff's Department will not be allowed as part of this project.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: use of premises and occupancy.

1.03 SECURITY PROGRAM

- A. No watchmen will be provided by Owner.
- B. All personnel that passes the back ground check will be required to wear a County Issued badge while working on premises.
- C. All personnel, vehicles and storage trailers in or around the facility must be identified, reviewed and recorded as needed by the governing security detail according to location of the building being occupied.
- D. Each contractor shall be responsible for its work, materials, tools, equipment, or other items stored at the site and its forces.
- E. If damage occurs to any of the foregoing during construction, each contractor shall repair or replace the same without cost to the Owner.
- F. Each contractor is responsible for securing offices and storage trailers.
- G. Coordination of required security measures strongly recommended to be reviewed as early in the project as possible as not to delay the start of construction.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Entry only to authorized persons with proper identification.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3600

SAFETY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General Contractor responsibilities.
- B. Subcontractor responsibilities.
- C. Owner responsibilities.

1.02 RELATED DOCUMENTS

- A. AIA A401 - Standard Form of Agreement Between Contractor and Subcontractor.

1.03 GENERAL CONTRACTOR RESPONSIBILITIES

- A. General Contractor responsibilities are listed in:
 - 1. AIA A401 - Standard Form of Agreement Between Contractor and Subcontractor.
- B. General Contractor will also:
 - 1. Remind subcontractors, suppliers and owners of safety regulations associated with any activity, with the activity participants, and others working on the site.
 - 2. Observe project activities of the subcontractors, suppliers, or Owners, and make them aware of safety violations. Follow-up on immediate corrective actions needed by those parties.
 - 3. Require designation of proper competent person(s) for activities requiring such designation, prior to commencement of the activity. This includes but is not limited to; excavation, scaffold erection, steel erection, stairways and ladders.
 - 4. Require a copy of written certification of equipment operators on site, from the subcontractor or supplier, prior to equipment operation on the site. This includes but is not limited to; lift trucks, forklifts and man lifts (platform or boom).
 - 5. Have the authority to stop the unsafe activity of anyone on the site.

1.04 SUBCONTRACTOR RESPONSIBILITIES

- A. The subcontractors responsibilities are listed in:
 - 1. AIA A401 - Standard Form of Agreement Between Contractor and Subcontractor.
- B. The subcontractor will also:
 - 1. Provide the listed responsibilities to their on-site supervisory staff including but not limited to Foremen, superintendents, etc.
 - 2. Provide a designated competent person for required activities, including but not limited to: excavation, scaffold erection, steel erection, stairways and ladders.
 - 3. Provide written certification for all persons operating equipment, that require certification, prior to operation of that equipment at the site.
 - 4. Attend and participate at weekly site coordination meetings scheduled by the General Contractor Field Project Manager, communicate any project related safety issues for resolution.
 - 5. Will make timely efforts to resolve safety issues raised by the General Contractor, the Owner, and other Subcontractors.

1.05 OWNER RESPONSIBILITIES

- A. The Owner's responsibilities are listed in:
 - 1. AIA A401 - Standard Form of Agreement Between Contractor and Subcontractor.
 - 2. AIA B141 Part 1 & 2 Standard Form of Agreement Between Owner and Architect.
 - 3. AIA A101 Standard Form of Agreement Between Owner and Contractor.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED END OF SECTION

SECTION 01 4000

QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. References and standards.
- B. Quality assurance submittals.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection services.
- F. Manufacturers' field services.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittal procedures.
- B. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

- A. ASTM C 1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
- B. ASTM E 329 - Standard Specification for Agencies Engaged Construction Inspection and/or Testing.

1.04 SUBMITTALS

- A. Testing Agency Qualifications:
 - 1. Prior to start of Contract Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
- B. Design Data: Submit for CBJ Architects P.C.'s knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for McHenry County's information.
- C. Test Reports: After each test/inspection, promptly submit two copies of report to CBJ Architects P.C. and to the Owner.
 - 1. Include as a minimum the following:
 - a. CBJ Architects P.C. project number.
 - b. Date issued.
 - c. Project title and number.
 - d. Name of inspector.
 - e. Date and time of sampling or inspection.
 - f. Identification of product and specifications section.
 - g. Location in the Project.
 - h. Type of test/inspection.
 - i. Date of test/inspection.
 - j. Results of test/inspection.
 - k. Conformance with Contract Documents.
 - l. When requested by CBJ Architects P.C., provide interpretation of results.
- D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to CBJ Architects P.C., in quantities specified for Product Data.

1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 2. Certificates may be recent or previous test results on material or product, but must be acceptable to CBJ Architects P.C..
- E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the McHenry County's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- F. Manufacturer's Field Reports: Submit reports for CBJ Architects P.C.'s benefit as contract administrator or for McHenry County.
1. Submit report in duplicate within 20 days of observation to CBJ Architects P.C. for information.
 2. Submit information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- G. Erection Drawings: Submit drawings for CBJ Architects P.C.'s benefit as contract administrator or for McHenry County.
1. Submit information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.05 DEFINITIONS

- A. Specifications are in 3-part CSI Master Format
- B. Contractor shall be defined as contractor, Subcontractor, sub-Subcontractor, or material supplier.
- C. Contract shall be defined as contract, subcontract or purchase order.
- D. Omitted phrases such as **The Contractor Shall, In Conformity With, As Noted On The Drawings, In Accordance With The Plans, An, And, The, All** are intentional for clarification and shall be included by inference with same.

1.06 TESTING AND INSPECTION AGENCIES

- A. General Contractor will employ and pay for services of an independent testing agency to perform specified testing where noted in individual sections.
- B. As indicated in individual specification sections, McHenry County or Contractor shall employ and pay for services of an independent testing agency to perform specified testing.
- C. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- D. General Contractor Employed Agency:
 1. Contractor Employed Agency:
 2. Laboratory: Authorized to operate in State in which Project is located.
 3. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
 4. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.

- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from CBJ Architects P.C. before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from CBJ Architects P.C. before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.03 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Testing Agency Duties:
 - 1. Test samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at site. Cooperate with CBJ Architects P.C. and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify CBJ Architects P.C. and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Perform additional tests and inspections required by CBJ Architects P.C..
 - 7. Attend preconstruction meetings and progress meetings.
 - 8. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify CBJ Architects P.C. and laboratory 24-48 hours prior to expected time for operations requiring testing/inspection services.
 - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 - 6. Arrange with McHenry County's agency and pay for additional samples, tests, and inspections

required by Contractor beyond specified requirements.

- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by CBJ Architects P.C..
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.
- G. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by CBJ Architects P.C.. Payment for re-testing will be charged to the Contractor by deducting testing charges from the Contract Price, plus the time spent by CBJ Architects P.C. representatives. \$120 per hour will be charged.

3.04 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to CBJ Architects P.C. 30 days in advance of required observations.
 - 1. Observer subject to approval of CBJ Architects P.C..
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.05 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of CBJ Architects P.C., it is not practical to remove and replace the Work, CBJ Architects P.C. will direct an appropriate remedy or negotiate/ adjust payment.

END OF SECTION

SECTION 01 5000

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary telecommunications services.
- B. Temporary telephone service.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Waste removal facilities and services.
- G. Fire Protection.
- H. Project identification sign.
- I. Field offices.

1.02 RELATED REQUIREMENTS

- A. Section 01 5100 - Temporary Utilities.
- B. Section 01 5500 - Vehicular Access and Parking.
- C. Section 01 3553 - Security Procedures.

1.03 TELECOMMUNICATIONS SERVICES

- A. Each Contractor shall provide, maintain, and pay for telephone service to contractor's field office at time of project mobilization if required.
- B. Long distance calls charged to General Contractor monthly billing will be charged to appropriate Contractor at the minimum rate of \$1.00 per phone call plus long distance charges.

1.04 TEMPORARY SANITARY FACILITIES

- A. General Contractor to provide and maintain on site chemical toilet facilities and enclosures in compliance with OSHA regulations. This shall be provided at time of project mobilization.
- B. Use of existing facilities is not permitted.
- C. All Contractors shall maintain the temporary facilities in a clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

1.05 PROTECTION

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Each Contractor shall comply with all Applicable Standards, including but not limited to the following:
 - 1. Provide barricades separating work areas from occupied areas within the existing building.
 - 2. General Orders and Regulations on Safety in Construction (State of Illinois Department of Industry, Labor and Human Relations Commission).
 - 3. OSHA Regulations
 - 4. Other applicable, city, state, and federal ordinances.

5. Provide as required by the Owner, and Safety Compliance Agencies fences, planking, guard lights, barricades, warning signs, and guard for protection, and such other devices, equipment, or material as is necessary to comply with applicable regulations.
 6. Protection of sidewalks, curbs, streets, drives and existing construction.
- C. Landscaping and walks:
1. Protect trees, shrubs, lawns, landscape areas from damage.
 2. Provide planking over walks and drives to prevent damage.
 3. Such protection includes entire site.
- D. Weather Protection:
1. Each Contractor shall protect against rain, wind, snow, ice, storms, or heat.
 2. Maintain work, materials, apparatus, and fixtures free from damage.
 3. Cover work at days and weeks end that may sustain damage.
 4. Remove snow and ice as necessary for safe and proper execution of work.
- E. Water Protection; protect at all times from:
1. Rainwater.
 2. Groundwater.
 3. Backed up drains and sewers.
 4. Other water.
- F. Dust Protection:
1. Each Contractor will be responsible for all costs associated with building clean-up due to omission of appropriate dust protection for their work.
- G. Each Contractor to Protect:
1. Own work.
 2. Previously completed work of other trades.
 3. Responsibility for compliance with all applicable statutes, regulations, orders, or standards remains with the Contractor provided that if General Contractor LLC directs Contractor to remedy or correct a hazardous condition, Contractor will immediately undertake appropriate remedial or corrective action and General Contractor LLC shall have no liability therefore, as a result of such discovery, such directive, or otherwise.
- H. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.06 INTERIOR ENCLOSURES

- A. The General contractor shall provide temporary partitions and ceilings as required to separate work areas from McHenry County occupied areas, to prevent penetration of dust and moisture into McHenry County-occupied areas, and to prevent damage to existing materials and equipment.
- a. A temporary wall shall be erected between the new office space for MCETSB and the existing office space for the Workforce Network group.
- B. Temporary Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
1. Maximum flame spread rating of 75 in accordance with ASTM E 84.
- C. The General Contractor will be responsible for all costs associated with building clean-up due to omission of appropriate dust protection for their work.

1.07 CLEANING AND WASTE REMOVAL

- A. General Contractor Responsibilities:
1. Will provide waste removal facilities required to maintain the site in clean and orderly condition for general clean up only.
 2. Excess or unusual disposal of debris in dumpsters including excess concrete, masonry brick or block, wooden pallets, or hazardous materials is not allowed and must be removed by

- contractor.
- 3. Final cleaning of building including final sweeping, vacuuming and washing of glass.

B. Contractor Responsibilities:

1. Must follow requirements of McHenry County Sheriff's Department and Department of Corrections.
2. Compact or flatten all bulk material prior to placement in dumpsters. Contractors are responsible for disposing recyclable materials appropriately in the dumpsters provided.
3. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids. Closed chutes and containers shall be provided by Contractor requiring such usage.
4. Keep all areas of site and around dumpsters clear of rubbish material.
5. Cleanup of all scraps, debris, and rubbish on a daily basis and place in a dumpster located at grade level.
6. Prevent accumulation of debris or other materials which could cause a hazard.
7. Cleanup every afternoon.
8. Final cleaning of all fixtures and equipment by installing contractor prior to final acceptance and final payment. See note number 2.
9. Rubble or demolition debris shall be disposed in separate dumpsters provided by contractor at contractor's expense.
10. Burning of debris is not permitted.
11. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction

1.08 FIRE PROTECTION

- A. No smoking will be allowed within new construction.
- B. General Contractor will provide the following:
 1. One (1) - 10# A,B,C dry chemical fire extinguisher in each area of building as required.
- C. Each contractor shall provide the following:
 1. One (1) - 10# A,B,C dry chemical fire extinguisher in each trailer or shed.
 2. Suitable fire protection for open flame sources of construction work.
 3. Fire watch as necessary.

1.09 FIELD OFFICES

- A. General Contractor will not have an office within the building.
- B. Contractors to provide own as required and approved by the Owner.
- C. Locate office and storage trailers where directed by Owner; relocate as necessary.

1.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 5300

TEMPORARY CONSTRUCTION AND AIDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary ladders and ramps.
- B. Hoists and cranes.
- C. Scaffolding and platforms.

1.02 RELATED SECTIONS

- A. Section 01 5000 - Temporary Facilities and Controls.

1.03 TEMPORARY CONSTRUCTION

- A. Each contractor shall provide and maintain, as required for their Work and in compliance with applicable safety codes and regulations the following:
 - 1. Ladders, secured as required. No aluminum ladders are allowed.
 - 2. Ramps.
 - 3. Chutes and runways.
 - 4. Barricades and fencing.
 - 5. Security.
 - 6. Other items as required for proper installation of Work.

1.04 HOISTING

- A. The Owner will not provide material or personnel hoisting equipment.
- B. Each contractor to provide cranes, lifts, pumps, etc. as required to perform work.

1.05 SCAFFOLDING AND PLATFORMS

- A. The Owner will not provide any scaffolding or work platforms.
- B. Each contractor shall provide and maintain, as required for their Work and in compliance with applicable safety codes and regulations the following:
 - 1. Scaffolding or scaffolding towers.
 - 2. Work platforms of any kind.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 5500

VEHICULAR ACCESS AND PARKING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Access roads.
- B. Parking.
- C. Existing pavements and parking areas.
- D. Permanent pavements and parking facilities.
- E. Construction parking controls.
- F. Flag persons.
- G. Flares and lights.
- H. Haul routes.
- I. Maintenance.
- J. Removal, repair.
- K. Mud from site vehicles.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: access to site and occupancy.

PART 2 PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

- A. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- B. Flag Person Equipment: As required by local jurisdictions.

PART 3 EXECUTION

3.01 PREPARATION

- A. Excavation Contractor to clear areas, provide surface and storm drainage of road, parking, area premises, and adjacent areas.

3.02 ACCESS ROADS

- A. Maintain access to fire hydrants and control valves free of obstructions.

3.03 PARKING

- A. Use of designated areas of existing parking facilities by construction personnel is permitted.
- B. Do not allow heavy vehicles or construction equipment in parking areas.
- C. If during construction it becomes necessary to move materials, trailers, or sheds, it will be the responsibility of the contractor affected at no cost to the Owner.

3.04 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.

- C. Prevent parking on or adjacent to access roads or in non-designated areas.

3.05 FLAG PERSONS

- A. Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

3.06 FLARES AND LIGHTS

- A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.07 HAUL ROUTES

- A. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
- B. Confine construction traffic to designated haul routes.
- C. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

3.08 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Relocate as Work progresses, to maintain effective traffic control.

3.09 MAINTENANCE

- A. Each contractor shall maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, Products, mud, snow, and ice.
- B. Each contractor shall maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- C. If responsibility cannot be fixed, costs will be pro-rated to all contractors on site.
- D. The Owner will not be responsible for payment of damaged items.

3.10 REMOVAL, REPAIR

- A. Repair existing facilities damaged by use, to original condition.
- B. Remove equipment and devices when no longer required.
- C. Repair damage caused by installation.
- D. Remove post settings to a depth of 2 feet.

3.11 MUD FROM SITE VEHICLES

- A. Provide means of removing mud from vehicle wheels before entering streets.
- B. Clean up public streets of excess mud and debris by the contractor shall be completed to the satisfaction of the local governing authority.
- C. Lack of cleaning will result in back charges to the appropriate contractor for the men and machinery deemed necessary by the Owner to clean the debris.

END OF SECTION

SECTION 01 5721

INDOOR AIR QUALITY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Construction procedures to promote adequate indoor air quality after construction.

1.02 PROJECT GOALS

- A. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
 - 1. Cleaning of ductwork is not contemplated under this Contract.
 - 2. Contractor shall bear the cost of cleaning required due to failure to protect ducts and equipment from construction dust.
- B. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants.
 - 1. Furnish products meeting the specifications.
 - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.

1.03 DEFINITIONS

- A. Adsorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

PART 3 EXECUTION

2.01 CONSTRUCTION PROCEDURES

- A. Prevent the absorption of moisture and humidity by adsorptive materials by:
 - 1. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
 - 2. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
 - 3. Provide sufficient ventilation for drying within reasonable time frame.
- B. Begin construction ventilation when building is substantially enclosed.
- C. Do not store construction materials or waste in mechanical or electrical rooms.
- D. Prior to use of return air ductwork without intake filters clean up and remove dust and debris generated by construction activities.
 - 1. Inspect duct intakes, return air grilles, and terminal units for dust.
 - 2. Clean plenum spaces, including top sides of lay-in ceilings, outsides of ducts, tops of pipes and conduit.
 - 3. Clean tops of doors and frames.
 - 4. Clean mechanical and electrical rooms, including tops of pipes, ducts, and conduit, equipment, and supports.
 - 5. Clean return plenums of air handling units.
 - 6. Remove intake filters last, after cleaning is complete.
- E. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.

- F. Use other relevant recommendations of SMACNA IAQ Guideline for Occupied Buildings Under Construction for avoiding unnecessary contamination due to construction procedures.

END OF SECTION

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations and procedures.
- E. Procedures for McHenry County-supplied products.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Document – McHenry County Purchasing Document
- B. Section 01 4000 - Quality Requirements: Product quality monitoring.

1.03 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 15 days after date of Contract Agreement or sooner if needed.
 - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Submit as specified in Section 01 3000 - Administrative Requirements.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
- E. Indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- F. Additional data: Architect may request additional samples or data if necessary to determine quality of product even though not called for in specifications sections.

PART 2 PRODUCTS

2.01 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description unless specifically called out in the specifications.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications; no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.02 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.

- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.
- B. CBJ Architects P.C. will consider requests for substitutions only if received within 15 days after date of Agreement.
- C. Substitutions will not be considered when a product becomes unavailable through no fault of the Contractor.
- D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- E. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to McHenry County.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Will reimburse McHenry County and CBJ Architects P.C. for review or redesign services associated with re-approval by authorities. rate of \$150 per hour will apply.
- F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- G. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The CBJ Architects P.C. will notify Contractor in writing of decision to accept or reject request.

3.02 OWNER-SUPPLIED PRODUCTS

- A. McHenry County's Responsibilities:
 - 1. Arrange for and deliver McHenry County reviewed shop drawings, product data, and samples, to Contractor.
 - 2. Arrange and pay for product delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
 - 1. Review McHenry County reviewed shop drawings, product data, and samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with McHenry County.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.
 - 5. Contractor responsible for installation of owner-supplied products, within their respective specification sections or as noted in Section 01100 - Summary of Work, per the manufacturer's instructions.

3.03 PRODUCT/ASSEMBLIES/SYSTEM SUBSTITUTIONS

- A. Where the Bid Documents stipulate a particular Product, substitutions will be considered by the Architect up to 7 days before receipt of bids.
- B. The submission shall provide sufficient information to determine acceptability of such bids.
- C. When a request to substitute a Product is made, the Architect may approve the submission and will issue an Addendum to known bidders.
- D. In submission of substitutions to products specified, bidders shall include in their bid, any changes required in the Work and changes to Contract Time and Contract Price to accommodate such substitutions. A later claim by the bidder for an addition to the Contract Time or Contract Price because of changes in work necessitated by use of substitutions shall not be considered.
- E. Substitute Products will be considered if submitted as an attachment to the Bid Form
- F. The submission shall provide sufficient information to determine acceptability of such products.
- G. Provide complete information on required revisions to other Work to accommodate each substitution, the value of additions to or reductions from the Bid Amount, including revisions to other Work.
- H. Provide Products as specified unless substitutions are submitted in this manner and subsequently accepted.
- I. Approval to submit substitutions prior to submission of Bids is not required.

3.04 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- D. General Contractor will not provide a means to unload, or hoist products at site. Contractors are responsible for receiving, unloading, and hoisting of all products. If contractor fails to receive, unload, or hoist any of their products, the Owner will charge the contractor a rate of \$150.00 per hour plus equipment rental for said handling.

3.05 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturers' instructions in locations approved by the Owner. Pre-arrangements with the Owner must be made.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.
- E. Provide off-site storage and protection when site does not permit on-site storage or protection. Insurance for off-site storage will be required prior to submitting application for payment. Include Insurance Statement with payment request.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
- J. Neither Architect nor the Owner assumes any responsibility for materials stored on site.

END OF SECTION

SECTION 01 7000

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of McHenry County personnel.
- I. Closeout procedures, except payment procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittals procedures.
- B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- D. Section 01 5100 - Temporary Utilities: Temporary heating, cooling, and ventilating facilities.
- E. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- F. Individual Product Specification Sections:
 - 1. Advance notification to other sections of openings required in work of those sections.
 - 2. Limitations on cutting structural members.

1.03 SUBMITTALS

1.04 PROJECT CONDITIONS

- A. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and / or unwanted areas.
- B. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- . Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.05 COORDINATION

- A. Coordinate work of alterations and renovations to expedite completion sequentially and to accommodate occupancy requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to

ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After McHenry County occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of McHenry County's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Existing Conditions:
 - 1. Are not warranted or guaranteed to be accurate.
 - 2. Contractors must interpret existing conditions indicated as to their accuracy.
 - 3. Existing and underground conditions based on available information at time of bidding.
 - 4. Existing information is given for contractor's assistance in location only.
- C. Responsibility of measurement and inspection.
 - 1. Each contractor to obtain complete data as required for his/her job.
 - 2. Obtain same prior to submitting shop drawings or fabrication.
 - 3. Contractors shall be responsible for errors in same.
- D. Verify that demolition is complete in alteration areas and areas are ready for installation of new work.
- E. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- F. Examine and verify specific conditions described in individual specification sections.
- G. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- H. Prior to Cutting: Examine existing conditions prior to commencing work, including elements

subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions. Submit written request if applicable under 1.03B.

3.02 PREPARATION

- A. Cut, move, or remove items as necessary for access to alterations and renovation work. Replace and restore at completion.
- B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished work.
- C. Remove debris and abandoned items from area and from concealed spaces.
- D. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ducts and piping to prevent condensation in exposed areas.
- E. Prepare surfaces and remove surface finishes to provide for proper installation of new work and finishes.
- F. Clean substrate surfaces prior to applying next material or substance.
- G. Seal cracks or openings of substrate prior to applying next material or substance.
- H. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a pre-installation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify CBJ Architects P.C. five working days in advance of meeting date.
- D. The General Contractor will prepare an agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within four days after meeting to participants, with one copy each to CBJ Architects P.C., McHenry County, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify CBJ Architects P.C. of any discrepancies discovered.
- C. General Contractor responsibilities:
 - 1. Benchmark and working point reference lines.
 - 2. Below grade storm, sanitary, water and utilities, one time for plan location.
 - 3. Parking/drive area curbs and limits.
 - a. First time for corners and elevations prior to placing base course.
 - b. Second time for final boundary and elevations prior to final grading and placement of curbs.
 - 4. Rough locations of corners of work.
 - 5. Location of construction limit lines.
- D. Contractor(s):
 - 1. Final layout of all work including elevations.

2. Verification of lines, levels, locations and dimensions.
 3. Corrections due to errors in layout work.
 4. Beginning of work implies acceptance of layout of previous work and existing conditions.
- E. Contractor(s) shall locate and protect survey control and reference points at start of project construction.
- F. Control datum for survey is that established by McHenry County provided survey.
- G. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- H. Promptly report to CBJ Architects P.C. the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations so as to avoid waste due to necessity for replacement.
- B. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 1. Verify that construction and utility arrangements are as shown.
 2. Report discrepancies to CBJ Architects P.C. before disturbing existing installation.
 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 5000 in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alteration work.
- D. Remove existing work as indicated and as required to accomplish new work.
 1. Remove items indicated on drawings.
 2. Relocate items indicated on drawings.
 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 4. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for

- service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. Provide temporary connections as required to maintain existing systems in service.
- 4. Verify that abandoned services serve only abandoned facilities.
- 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- H. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to CBJ Architects P.C.
- I. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- J. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for CBJ Architects P.C. review and request instructions.
- K. Trim existing wood doors as necessary to clear new floor finish. Refinish trim as required.
- L. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- M. Refinish existing surfaces as indicated:
- N. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
- O. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
 - 1. Patch as specified for patching new work.
- P. Clean existing systems and equipment.
- Q. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- R. Do not begin new construction in alteration areas before demolition is complete.
- S. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.

5. Repair areas adjacent to cuts to required condition.
 6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-conforming work.
- D. Execute cutting and patching including excavation and fill to complete the work, to uncover work in order to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit products together to integrate with other work.
 - E. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
 - F. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
 - G. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
 - H. Restore work with new products in accordance with requirements of Contract Documents.
 - I. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - J. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
 - K. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
 - L. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - M. Patch or replace surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. Repair substrate prior to patching finish. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.08 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- E. Lack of cleaning will result in a back charge of \$50.00 per hour to the appropriate contractor.

3.09 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

3.10 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify the Owner in writing seven days prior to start-up of each item. Official warranty to start at substantial completion only.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.11 DEMONSTRATION AND INSTRUCTION

- A. See Section 01 7900 (01820) - Demonstration and Training.
- B. Demonstrate operation and maintenance of products to McHenry County's personnel two weeks prior to date of Substantial Completion.
- C. Perform instruction in a classroom environment located where directed by the Owner.
- D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with McHenry County's personnel in detail to explain all aspects of operation and maintenance.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- F. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

3.12 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Testing, adjusting, and balancing HVAC systems.

3.13 FINAL CLEANING

- A. The General Contractor will provide interior final cleaning prior to Owner Occupancy.
- B. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- C. Replace filters of operating equipment by Mechanical Subcontractor installing the equipment.
- D. Clean debris from roofs, gutters, downspouts, and drainage systems is responsibility of the responsible contractor.
- E. Clean site; sweep paved areas, rake clean landscaped surfaces is the responsibility of the installing contractor.
- F. Each contractor is responsible for removing waste and surplus materials, rubbish, and construction facilities from the site. See section 01565 for security requirements

3.14 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to CBJ Architects P.C.
- B. Accompany Project Architect on preliminary inspection to determine items to be listed for completion or correction in Contractor's Certificate of Substantial Completion.
- C. Notify CBJ Architects P.C. when work is Substantially Complete and ready for inspection.
- D. McHenry County will occupy all of the building.
- E. Correct items of work noted in completion / punch list Certificates of Substantial Completion and comply with requirements for access to McHenry County-occupied areas.
- F. Accompany Field Project Manager on preliminary final inspection.
- G. Notify the Owner and Architect when work is considered finally complete.
- H. Complete items of work determined by CBJ Architects P.C.'s final inspection.

END OF SECTION

SECTION 01 7419

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- E. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
- F. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

PART 3 EXECUTION

2.01 WASTE MANAGEMENT PROCEDURES

- A. See Section 01 3000 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. See Section 01 5000 for additional requirements related to trash/waste collection and removal facilities and services.
- C. See Section 01 6000 for waste prevention requirements related to delivery, storage, and handling.
- D. See Section 01 7000 for trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

2.02 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Architect.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
 - 1. Pre-bid meeting.
 - 2. Pre-construction meeting.
 - 3. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. Provide containers as required.
 - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.

- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

END OF SECTION

SECTION 01 7800

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Project Record Documents.
- C. Operation and Maintenance Data for Equipment and Systems.
- D. Operation and Maintenance Data for Materials and Finishes.
- E. Warranties and Guarantees.

1.02 RELATED REQUIREMENTS

- A. Section 00 2113 Instructions To Bidders: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents (As-Built Drawings): Submit three (3) printed copies and one (1) digital copy of these documents within ten days after Date of Substantial Completion, prior to final Application for Payment to the Owner.
- B. Operation and Maintenance Data:
 - 1. Submit three (3) copies within ten days after receipt of close out request from the Owner or 30 days prior to substantial completion. Final payment will not be made until receipt of this documentation. If revisions are to be made, Subcontractor to submit three (3) sets of revised final documents within 10 days after inspection.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by McHenry County, submit completed documents within ten days after acceptance.
- C. Warranties and Guarantees:
 - 1. For equipment or component parts of equipment put into service during construction with McHenry County's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after receipt of close out request from CBJ Architects P.C. or 30 days prior to substantial completion. Final payment will not be made until receipt of this documentation.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. The General Contractor will maintain on site one set of the following record documents.
 - 1. Drawings.
 - 2. Specifications.

3. Addenda.
 4. Construction Bulletins and other modifications to the Project.
 5. Reviewed shop drawings, product data, and samples.
- B. Each Subcontractor will provide the General Contractor with a record of actual revisions to the work.
 - C. Ensure entries are complete and accurate, enabling future reference by McHenry County.
 - D. These record documents shall be stored separate from documents used for construction.
 - E. Record information concurrent with construction progress.
 - F. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and modifications.
 - G. Legibly mark each item on the record drawings to record actual construction including:
 1. Measured depths of foundations in relation to finish first floor datum.
 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 4. Field changes of dimension and detail.
 5. Details not on original Contract drawings.
 - H. Each Subcontractor will also be responsible for maintaining their own set of record drawings in order to submit three (3) copies prior to final Application for Payment.

3.02 GENERAL REQUIREMENTS OF OPERATION AND MAINTENANCE DATA

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 1. Product data, with catalog number, size, composition, and color and texture designations.
 2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion

of data.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- C. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- D. Provide servicing and lubrication schedule, and list of lubricants required.
- E. Include manufacturer's printed operation and maintenance instructions.
- F. Include sequence of operation by controls manufacturer.
- G. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- H. Provide control diagrams by controls manufacturer as installed.
- I. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- J. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- K. Include test and balancing reports.
- L. Additional Requirements: As specified in individual product specification sections.

3.05 OPERATION AND MAINTENANCE MANUAL

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B. Prepare data in the form of an instructional manual.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- F. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- G. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.

- H. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of CBJ Architects P.C., Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Air and water balance reports.
 - c. Certificates.
 - d. Photocopies of warranties and bonds.
- I. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.
- J. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of CBJ Architects P.C., Consultants, and Contractors with name of responsible parties; schedule of products and systems, indexed to content of the volume.

3.06 WARRANTIES AND GUARANTEES

- A. Obtain warranties and guarantees, executed in triplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with McHenry County's permission, leave date of beginning of time of warranty until the Date of Substantial Completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute warranties/guarantees.
- D. Retain warranties and guarantees until time specified for submittal.
- E. Subcontractor to submit original warranty and two (2) copies. Warranty shall clearly state the name of the Project, Owner's name; Subcontractor's name(s) and date of origin.
- F. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.

END OF SECTION

SECTION 01 7900

DEMONSTRATION AND TRAINING

PART 1 GENERAL

1.01 SUMMARY

- A. Demonstration of products and systems where indicated in specific specification sections.
- B. Training of McHenry County personnel in operation and maintenance is required for:
 - 1. Items specified in individual product Sections.
- C. Training of McHenry County personnel in care, cleaning, maintenance, and repair is required for:
 - 1. Items specified in individual product Sections.

1.02 RELATED REQUIREMENTS

- A. Section 01 7800 - Closeout Submittals: Operation and maintenance manuals.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Training Plan: McHenry County will designate personnel to be trained; tailor training to needs and skill-level of attendees.
 - 1. Submit to McHenry County.
 - 2. Submit not less than four weeks prior to start of training.
 - 3. Revise and resubmit until acceptable.
 - 4. Provide an overall schedule showing all training sessions.
 - 5. Include at least the following for each training session:
 - a. Identification, date, time, and duration.
 - b. Description of products and/or systems to be covered.
 - c. Name of firm and person conducting training; include qualifications.
 - d. Intended audience, such as job description.
 - e. Objectives of training and suggested methods of ensuring adequate training.
 - f. Methods to be used, such as classroom lecture, live demonstrations, hands-on, etc.
 - g. Media to be used, such as slides, hand-outs, etc.
 - h. Training equipment required, such as projector, projection screen, etc., to be provided by Contractor.
- C. Training Manuals: Provide training manual for each attendee; allow for minimum of four attendees per training session.
 - 1. Include applicable portion of O&M manuals.
 - 2. Include copies of all hand-outs, slides, overheads, video presentations, etc., that are not included in O&M manuals.
 - 3. Provide one extra copy of each training manual to be included with operation and maintenance data.
- D. Training Reports:
 - 1. Identification of each training session, date, time, and duration.
 - 2. Sign-in sheet showing names and job titles of attendees.
 - 3. List of attendee questions and written answers given, including copies of and references to supporting documentation required for clarification; include answers to questions that could not be answered in original training session.

1.04 QUALITY ASSURANCE

- A. Instructor Qualifications: Familiar with design, operation, maintenance and troubleshooting of the relevant products and systems.
 - 1. Provide as instructors the most qualified trainer of those contractors and/or installers who actually supplied and installed the systems and equipment.

2. Where a single person is not familiar with all aspects, provide specialists with necessary qualifications.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 DEMONSTRATION - GENERAL

- A. Demonstrations conducted during system start-up do not qualify as demonstrations for the purposes of this section, unless approved in advance by McHenry County.
- B. Demonstration may be combined with McHenry County personnel training if applicable.
- C. Operating Equipment and Systems: Demonstrate operation in all modes, including start-up, shut-down, seasonal changeover, emergency conditions, and troubleshooting, and maintenance procedures, including scheduled and preventive maintenance.
 1. Perform demonstrations not less than two weeks prior to Substantial Completion.
 2. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Non-Operating Products: Demonstrate cleaning, scheduled and preventive maintenance, and repair procedures.
 1. Perform demonstrations not less than two weeks prior to Substantial Completion.

3.02 TRAINING - GENERAL

- A. Conduct training on-site unless otherwise indicated.
- B. McHenry County will provide classroom and seating at no cost to Contractor.
- C. Provide training in minimum two hour segments.
- D. Training schedule will be subject to availability of McHenry County's personnel to be trained; re-schedule training sessions as required by McHenry County; once schedule has been approved by McHenry County failure to conduct sessions according to schedule will be cause for McHenry County to charge Contractor for personnel "show-up" time.
- E. Review of Facility Policy on Operation and Maintenance Data: During training discuss:
 1. The location of the O&M manuals and procedures for use and preservation; backup copies.
 2. Typical contents and organization of all manuals, including explanatory information, system narratives, and product specific information.
 3. Typical uses of the O&M manuals.
- F. Product- and System-Specific Training:
 1. Review the applicable O&M manuals.
 2. For systems, provide an overview of system operation, design parameters and constraints, and operational strategies.
 3. Review instructions for proper operation in all modes, including start-up, shut-down, seasonal changeover and emergency procedures, and for maintenance, including preventative maintenance.
 4. Provide hands-on training on all operational modes possible and preventive maintenance.
 5. Emphasize safe and proper operating requirements; discuss relevant health and safety issues and emergency procedures.
 6. Discuss common troubleshooting problems and solutions.
 7. Discuss any peculiarities of equipment installation or operation.
 8. Discuss warranties and guarantees, including procedures necessary to avoid voiding coverage.
 9. Review recommended tools and spare parts inventory suggestions of manufacturers.
 10. Review spare parts and tools required to be furnished by Contractor.
 11. Review spare parts suppliers and sources and procurement procedures.

- G. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

END OF SECTION

SECTION 02225

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of built site elements.
- B. Selective demolition of building elements for alterations purposes.
- C. Abandonment and removal of existing utilities and utility structures.

1.02 RELATED SECTIONS

- A. Section 01500 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- B. Section 01600 - Product Requirements: Handling and storage of items removed for salvage and relocation.
- C. Section 01700 - Execution Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products.

1.03 REFERENCES

- A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2004.

1.04 SUBMITTALS

- A. See Section 01300 - Administrative Requirements, for submittal procedures.
- B. Site Plan: Showing:
 - 1. Areas for temporary construction and field offices.
- C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

1.05 QUALITY ASSURANCE

- A. HVAC Firm: Company specializing in the type of work required.
 - 1. Minimum of 5 years of documented experience.

1.06 PROJECT CONDITIONS

- A. Comply with other requirements specified in Section 01700.

PART 2 PRODUCTS

PART 3 EXECUTION

3.01 SCOPE

- A. Remove ducts, etc... to accomplish new work.

- B. Remove other items indicated, for salvage, relocation, and recycling.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 3. Provide, erect, and maintain temporary barriers and security devices.
 - 4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 5. Do not close or obstruct roadways or sidewalks without permit.
 - 6. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
 - 7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from The County of McHenry.
- C. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. If hazardous materials are discovered during removal operations, stop work and notify CBJ Architects and The County of McHenry; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- E. Perform demolition in a manner that maximizes salvage and recycling of materials.
 - 1. Dismantle existing construction and separate materials.
 - 2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.
- F. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to The County of McHenry.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to The County of McHenry.

3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.

2. Report discrepancies to CBJ Architects before disturbing existing installation.
 3. Beginning of demolition work constitutes acceptance of existing conditions.
- B. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- C. Remove existing work as indicated and as required to accomplish new work.
1. Remove items indicated on drawings.
- D. Services (Including but not limited to HVAC. Remove existing systems and equipment as indicated.
1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 3. Verify that abandoned services serve only abandoned facilities before removal.
 4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- E. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work.
 4. Patch as specified for patching new work.

3.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

SECTION 09 5110

ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.

1.02 RELATED REQUIREMENTS

- A. Section 07 9000 - Joint Sealers: Acoustical sealant.
- B. Fire Alarm System: Fire alarm components in ceiling system.
- C. Fire-Suppression Sprinkler Systems: Sprinkler heads in ceiling system.
- D. HVAC.
- E. Interior Lighting: Light fixtures in ceiling system.
- F. Public Address Systems: Speakers in ceiling system.
- G. Fire Alarm Systems:
- H. Phone and Data Distribution System.

1.03 REFERENCE STANDARDS

- A. ASTM C 635 - Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- B. ASTM E 1264 - Standard Classification for Acoustical Ceiling Products.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on suspension system components and acoustical units.
- C. Manufacturer's Installation Instructions: Indicate special procedures.

1.05 QUALITY ASSURANCE

- A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.06 FIELD CONDITIONS

- A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

1.07 PROJECT CONDITIONS

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Install acoustical units after interior wet work is dry.

1.08 EXTRA MATERIALS

- A. See Section 01 6000 - Product Requirements, for additional provisions.
- B. Provide 5 percent of total acoustical unit area of each type of acoustical unit for McHenry County's use in maintenance of project.

PART 2 PRODUCTS

2.01 ACOUSTICAL UNITS

- A. Manufacturers:
 - 1. Match existing.
- B. Acoustical Units - General: ASTM E 1264, Class A.
- C. Acoustical Panels Type ACT1: ASTM E 1264 Type III, Class A, Cast ceiling Tile, conforming to the following:
 - 1. Product:(match existing)
 - 2. Thickness: 3/4 inches.
 - 3. Composition: Nodular, cast or molded.
 - 4. Light Reflectance: 0.90 percent, determined as specified in ASTM E 1264.
 - 5. NRC Range: 0.70, determined as specified in ASTM E 1264.
 - 6. Sag Resistance: Provide 15-year warranty.
 - 7. Ceiling Attenuation Class (CAC): 35, determined as specified in ASTM E 1264.
 - 8. Edge: SLB.
 - 9. Surface Color: White.
 - 10. Surface Pattern: non-directional textures.
 - 11. Suspension System: Exposed grid, 15/16 inches.
 - 12. Size: 24 x 24, 24 x 48 (match existing).

2.02 SUSPENSION SYSTEM

- A. Manufacturers:
 - 1. Armstrong World Industries, Inc..
 - 2. Chicago Metallic Corp..
 - 3. USG Interiors, Inc.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. Suspension Systems - General: ASTM C 635; die cut and interlocking components, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required.
- C. Exposed Steel Suspension System: Formed steel, commercial quality cold rolled; Intermediate-duty.
 - 1. Profile: Tee; 15/16 inch wide face. 9/16 for ACT3 only.
 - 2. Finish: White painted.

2.03 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Perimeter Moldings: Same material and finish as grid or the ceiling system specified.
 - 1. At Exposed Grid: Provide L-shaped molding for mounting at same elevation as face of grid.
- C. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3.02 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C 636, ASTM E 580, and manufacturer's instructions and as supplemented in this section.
- B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- C. Locate system to match existing layout.
- D. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.
- E. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- F. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- G. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- H. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- I. Do not eccentrically load system or induce rotation of runners.

3.03 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install units after above-ceiling work is complete.
- E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- F. Cutting Acoustical Units:
 - 1. Cut to fit irregular grid and perimeter edge trim.
 - 2. Make field cut edges of same profile as factory edges.
 - 3. Double cut and field paint exposed reveal edges.
- G. Where round obstructions occur, provide preformed closures to match perimeter molding.
- H. Install hold-down clips on each panel to retain panels tight to grid system; comply with fire rating requirements.
- I. Install hold-down clips on panels within 20 ft of an exterior door.

3.04 TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

3.05 CLEAN UP

- A. Remove cut-offs and carton waste to dumpster or as designated. Leave rooms clean. Remove marks, rough edges, and damaged tile.
- B. Deliver extra stock to Owner at close-out.

END OF SECTION

Remodeling For:

MODIFICATIONS FOR THE:

McHENRY COUNTY BASE BUILDING FIRE ALARM UPGRADES

500 RUSSEL COURT, WOODSTOCK, IL 60098

OWNER

COUNTY OF McHENRY
2200 N. Seminary Avenue
Woodstock, IL. 60098

ARCHITECT

CBJ ARCHITECTS P.C.
3521 Wintergreen Ter.
Algonquin, IL 60102
O: 847-997-9838
F: 847-658-0095

MEP ENGINEER

RTM ASSOCIATES
3 Executive Court, Unit 4
South Barrington, IL 60010
O: 847-756-4180
F: 847-756-4186



ABBREVIATIONS:

A.B.	ANCHOR BOLT	F.D.	FLOOR DRAIN	M.	METER	S.C.	SOLID CORE
ACT	ACOUSTICAL TILE	FDN.	FOUNDATION	MAN.	MANUAL	SD.	STORM DRAIN
ADJ.	ADJACENT	F.E.	FIRE EXTINGUISHER	MAS.	MASONRY	SGL.	SINGLE
A.F.F.	ABOVE FINISHED FLOOR	F.E.C.	FIRE EXTINGUISHER CABINET	MAT.	MATERIAL	SHTHG.	SHEATHING
AL.	ALUMINUM	FGL.	FIBERGLASS	MA.	MAXIMUM	S.S.	SANITARY SEWER
AVE.	AVENUE	FIN. FLR.	FINISHED FLOOR	MH.	MANHOLE	S.S.TL.	STAINLESS STEEL
		FR.	FRAME	MRK.	MARK	S.T.C.	SOUND TRANSMISSION CLASS
BLKG.	BLOCKING			SUSP.	SUSPENDED	SUSP.	SUSPENDED
BM.	BEAM	G.	GAS	SYMM.	SYMMETRICAL	T.B.	TEST BORING
B.O.	BOTTOM OF	G.B.	GRAB BAR			T.O.B.	TOP AND BOTTOM
BRG.	BEARING	GALV.	GALVANIZED			TEL.	TELEPHONE
BSMT.	BASEMENT	GFI.	GROUND FAULT INTERRUPTER			T.G.	TONGUE & GROOVE
		GND.	GROUND			THK.	THICKNESS
CA.	CARPET	GR.	GRADING	N.T.S.	NOT TO SCALE	T.O.	TOP OF
C.B.	CATCH BASIN					TYP.	TYPICAL
CHFR.	CHAMFER			UNE.	UNLESS OTHERWISE NOTED		
C.J.	CONSTRUCTION JOINT	H.B.	HOSE BIB	U.O.N.	UNLESS OTHERWISE NOTED		
C.L.	CENTERLINE	HC.	HOLLOW CORE				
C.J.	CONTROL JOINT	HDR.	HEADER				
CLR.	CLEARANCE	HDWR.	HARDWARE				
C.M.U.	CONCRETE MASONRY UNIT	HT.	HEIGHT	P.	PAINT		
COL.	COLUMN	HM.	HOLLOW METAL	P. PART.	PARTITION		
CONTR.	CONTRACTOR	H.P.T.	HIGH POINT	PC.	PIECE		
CPRS.	COMPRESSIBLE	HTR.	HEATER	PKT.	POCKET		
CSMT.	CASEMENT			PL.	PLATE		
CT.	CERAMIC TILE	INSTL.	INSTALLATION	P.L.	PROPERTY LINE		
				P. LAM.	PLASTIC LAMINATE		
D.H.	DOUBLE HUNG	JST.	JOIST	PLAS.	PLASTER		
D.L.	DEAD LOAD	JT.	JOINT	POLY.	POLYETHYLENE		
D.S.	DOWNSPOUT			PR.	PAIR		
D.T.	DRAIN TILE	K.D.	KNOCK DOWN	P. & S.	POLE AND SHELF		
		LBR.	LUMBER	PVMT.	PAVEMENT		
		L.F.	LINEAR FOOT				
		LG.	LONG	QT.	QUARRY TILE		
EL.	ELEVATION	L.L.	LIVE LOAD				
ENGR.	ENGINEER	LONG.	LONGITUDINAL	R.	RISER		
EP.	EPOXY	LRG.	LARGE	RAD.	RADIUS		
ESMT.	EASEMENT	LT.	LIGHT	R.D.	ROOF DRAIN		
EST.	ESTIMATE	LTG.	LIGHTING	REC.	RECESSED		
E.W.C.	ELECTRIC WATER COOLER	LT. WT.	LIGHTWEIGHT	REC'D	RECEIVED		
E.C.	ENCASE	LVR.	LOUVER	REF.	REFERENCE		
E.IST.	EXISTING			R.O.	ROUGH OPENING		
E.P.	EXPANSION			R.S.	ROUGH SAWN		
E.P. BT.	EXPANSION BOLT						
E.P. JT.	EXPANSION JOINT						



SITE LOCATIONS

STATE LOCATION



PROJECT SITE

LOCATION MAP



NORTH

DRAWING SYMBOLS KEY

	DOOR NUMBERS - REFER TO DOOR SCHEDULE
	WINDOW NUMBER
	WALL TYPE - REFER TO WALL TYPES
	REVISION MARK - REFER TO TITLE BLOCK FOR REVISION DATE
	ELEVATION REFERENCE
	ROOM NAME AND NUMBER AS NOTED - REFER TO ROOM FINISH SCHEDULE
	INTERIOR ELEVATION REFERENCE - REFER TO SHEET NUMBER INDICATED NEXT TO REFERENCE SYMBOL
	DETAIL REFERENCE - REFER TO SHEET NUMBER INDICATED IN BOTTOM OF SYMBOL
	BUILDING/WALL SECTION REFERENCE - REFER TO SHEET NUMBER INDICATED IN BOTTOM OF SYMBOL

GENERAL NOTES:

- ALL WORK OF ALL TRADES SHALL BE COMPLETED IN ACCORDANCE WITH ALL GOVERNING CODES AND ORDINANCES.
- EACH CONTRACTOR IS TO OBTAIN AND PAY FOR PERMITS, LICENSES, FEES, ETC. AS MAY BE REQUIRED FOR COMPLETION OF HIS OWN PORTION OF THE PROJECT.
- EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OWNER, THE OWNER'S OTHER CONTRACTORS, AND ALL OTHERS AT THE SITE.
- EACH CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. NEITHER THE OWNER NOR THE ARCHITECT ASSUMES RESPONSIBILITY FOR CONDITIONS OR DIMENSIONS SHOWN AS EXISTING.
- IF ANY CONTRACTOR OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE WITH APPLICABLE LAWS, STATUTES, BUILDING CODES, OR ORDINANCES, HE SHALL PROMPTLY NOTIFY THE ARCHITECT.
- ALL HOLES FOR PLUMBING, ELECTRICAL, HVAC, OR FIRE PROTECTION CONDUIT, PIPING, OR DUCTWORK ARE TO BE REPAIRED BY THE ASSOCIATED TRADE. ALL TRADES SHALL TAKE CARE TO MAKE HOLES ONLY AS LARGE AS NECESSARY. ALL HOLES SHALL BE NEATLY CUT. DO NOT PUNCH OR POUND HOLES IN WALLS OR ROOF DECK. ASSOCIATED TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY HOLES LEFT UNREPAIRED AND WILL BE BACK CHARGED ACCORDINGLY FOR SUCH REPAIRS. ANY HOLES OR PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE APPROPRIATELY FIRESTOPPED, DAMPERED, OR SEALED AS REQUIRED BY CODE.
- EACH CONTRACTOR SHALL INCLUDE NECESSARY DEMOLITION AND REMOVAL OF ALL MATERIAL AS REQUIRED TO PERFORM HIS WORK.
- ANY HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION, REMODELING, OR EXCAVATION SHALL BE REMOVED AND/OR CONTAINED IN ACCORDANCE WITH ALL GOVERNING LOCAL, STATE, AND FEDERAL REGULATIONS.
- DO NOT SCALE DRAWINGS.

DRAWING INDEX

GENERAL

G1.1 GENERAL INFORMATION SHEET

FIRE ALARM

FA-0 SYMBOL LIST AND NOTES
FA-1 FIRE ALARM FLOOR PLAN
FA-2 FIRE ALARM RISER DIAGRAM, NOTES AND SCHEDULE

EXISTING FINISHES NOTES:

IT WILL BE NECESSARY FOR THE MECHANICAL CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS TO ACCESS ABOVE FINISH CEILING SPACES. IT IS THE SOLE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND ANY OF HIS SUB-CONTRACTORS TO ENSURE THAT AFTER THEIR PORTION OF THE WORK IS COMPLETE THAT ANY FINISHED AREAS OF THE BUILDING ACCESSED OR ADJACENT TO ANY WORK AREAS ARE LEFT IN A FINISHED CONDITION EQUAL TO OR BETTER THAN PRIOR TO THE WORK. THE OWNER WILL DOCUMENT EXISTING CONDITIONS (AND PROVIDE ACCESS TO SUCH DOCUMENTATION) PRIOR TO THE START OF WORK BY THE CONTRACTORS. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN THE LOSS OF BOND DOLLARS. AREAS THAT ARE INCLUDED BUT NOT LIMITED TO INCLUDE, CEILINGS, CEILING GRIDS, LIGHT FIXTURES, SPRINKLER SYSTEMS, FIRE ALARM SYSTEMS, FINISHED WALLS, CARPETING, DESKS, OFFICE PARTITIONS, DOORS, WINDOWS, ETC...

PROJECT MANUAL IS PART OF THESE CONSTRUCTION DOCUMENTS.

CERTIFICATIONS:

ARCHITECT:

ENGINEER:

BID / PERMIT SUBMITTAL
MAY 20, 2016
PROJECT #15-024

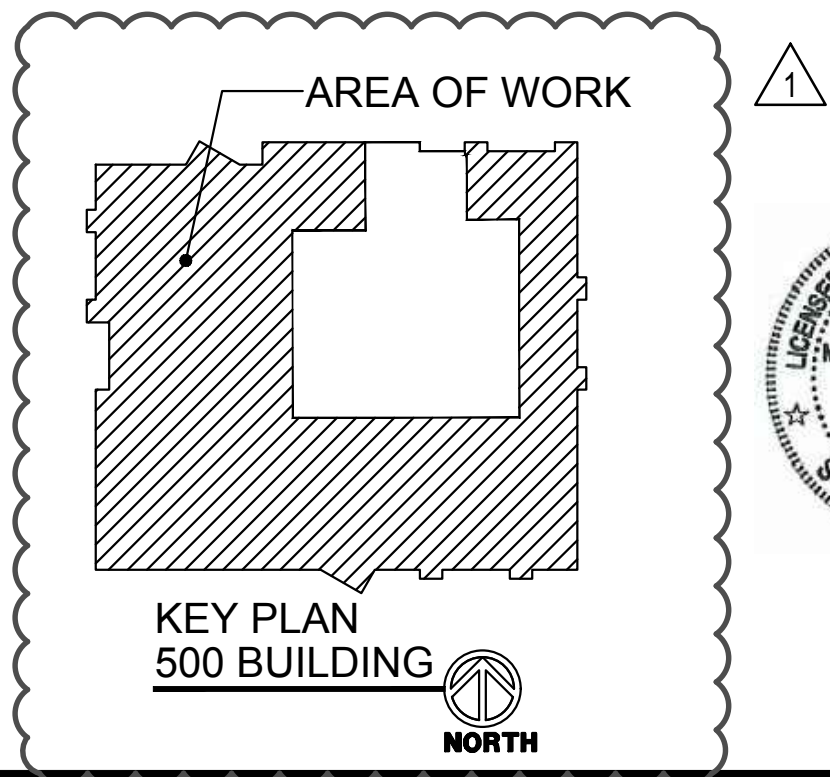
G1

GENERAL NOTES	
1.	THIS INSTALLATION SHALL BE IN COMPLIANCE WITH NEC, IBC, IFC, IECC2012, NFP72, AND VILLAGE OF WOODSTOCK, IL LOCAL AMENDMENTS.
2.	BEFORE COMMENCING WORK THE CONTRACTOR SHALL VISIT THE JOB SITE AND FULLY INFORM HIMSELF OF ALL CONDITIONS THAT AFFECT THE WORK, EXAMINE THE DRAWINGS, AND SUBMIT ANY QUESTIONS IN WRITING TO THE ENGINEER.
3.	THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT REQUIREMENTS BEFORE COMMENCING ANY WORK. THE PROJECT DRAWINGS FORM THE BASIS OF THIS CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND GRADE OF MATERIALS TO BE INSTALLED, EQUIPMENT TO BE FURNISHED, THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS, SPECIFICATIONS GOVERN UNLESS THE ARCHITECT/ENGINEER DIRECTS OTHERWISE.
4.	THE ELECTRICAL CONTRACTOR SHALL CHECK CAREFULLY ALL DRAWINGS NO EXTRA CHARGES SHALL BE ACCEPTED BY OWNER AFTER BIDDING FOR SUCH EQUIPMENT AND LABOR.
5.	EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO INSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
6.	INSTALL DEVICES AS INDICATED IN THIS SET OF DRAWINGS. ADJUST FINAL DEVICE LOCATIONS AS REQUIRED TO ACCOMMODATE WORK. NOTIFY THE ENGINEER AND/OR THE ARCHITECT IF ANY CONFLICTS ARE FOUND PRIOR TO BIDDING PROJECT. INSTALL CONDUIT AND BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES.
7.	DETERMINE, IN ADVANCE OF PURCHASE, THAT ALL ELECTRICAL MATERIALS AND EQUIPMENT TO BE INSTALLED SHALL FIT INTO THE ROOM OR SPACE ALLOCATED, AS INDICATED ON THE DRAWINGS, ALLOWING SUFFICIENT CLEARANCE FOR THE SAFE SERVICE AND/OR MAINTENANCE OF RELATED EQUIPMENT, INCLUDING THAT OF OTHER TRADES.
8.	ALL CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR INSTALLED. COLOR OF GROUNDING CONDUCTOR SHALL BE GREEN. SIZE OF GROUNDING CONDUCTOR SHALL BE AS REQUIRED PER NEC ARTICLE 250.122.
9.	ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR INSTALLED UNLESS OTHERWISE INDICATED. COLOR OF NEUTRAL CONDUCTOR SHALL BE WHITE.
10.	ALL CONDUCTOR SHALL BE MADE OF COPPER. MINIMUM WIRE SIZE SHALL BE #12AWG UNLESS OTHERWISE INDICATED. UTILIZE SOLID CONDUCTORS FOR WIRE GAGES UP TO #12AWG AND STRANDED CONDUCTOR FOR GAGES #10AWG AND LARGER.
11.	ALL WIRING SHALL BE INSTALLED IN A DEDICATED RACEWAY SYSTEM. MINIMUM RACEWAY SIZE SHALL BE 1/2" UNLESS OTHERWISE INDICATED.
12.	ALL PULL BOXES AND JUNCTION BOXES SHALL BE SIZED PER NEC ARTICLE 314, TABLES 314.16 BASED IN THE AMOUNT OF CABLE AND CONDUITS ENTERING/LEAVING THE BOX.
13.	ALL BREAKERS SERVING FIRE ALARM EQUIPMENT SHALL HAVE LOCK-OUT DEVICE INSTALLED UNLESS OTHERWISE INDICATED.
14.	INSTALL CONDUIT FROM THE TOP OF THE BAR JOIST.
15.	SERVICE EQUIPMENT, DISTRIBUTION & BRANCH CIRCUIT PANELBOARDS, SHALL HAVE A PANEL DIRECTORY INSTALLED. UTILIZE TYPE WRITER AS A MINIMUM FOR COMPLIANCE. HAND WRITTEN CARD DIRECTORIES ARE NOT ACCEPTABLE.
16.	ALL MOUNTING HEIGHTS OF DEVICES SHALL BE COORDINATED WITH ARCHITECTURAL ELEVATIONS OR ARCHITECT PRIOR TO ROUGH-IN.
27.	DO NOT INSTALL DEVICES IN DIFFERENT ROOMS BACK TO BACK. PROVIDE 6" SIDE BY SIDE IN BETWEEN.
28.	FOR THE AREA OF WORK WITH DAMAGED, DETERIORATED, COMPROMISED OR MISSING FIREPROOFING CREATED OR EXPOSED DURING CONSTRUCTION SHALL BE RESTORED TO FULL PROTECTIVE CAPACITY.
29.	FIRE PROOF/PATCH ALL PENETRATIONS THRU WALLS AND FLOORS TO RE-STABLISH THE FIRE RATING OF PARTITION.

ELECTRICAL SYMBOL LIST	
	FIRE ALARM CONTROL PANEL
	FIRE REMOTE ANNUNCIATOR
	FIRE ALARM REMOTE BOOSTER POWER SUPPLY
	FIRE ALARM PULL STATION
	DUCT SMOKE DETECTOR
	REMOTE TEST SWITCH
	WALL MOUNTED FIRE ALARM STROBE
	CEILING MOUNTED FIRE ALARM STROBE
	WALL MOUNTED FIRE ALARM HORN/STROBE
	CEILING MOUNTED FIRE ALARM HORN/STROBE
	FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
	HEAT DETECTOR (SEE DRAWINGS AND SCHEDULE FOR TYPE)
	RELAY
	FIRE ALARM MONITOR MODULE
	FIRE PROTECTION VALVE SUPERVISORY SWITCH (BY OTHERS)
	FLOW SWITCH
	FIRE PROTECTION BELL
	KNOX BOX
	AUTOMATIC TRANSFER SWITCH

ABBREVIATIONS	
WP	WEATHER PROOF
AC	ABOVE THE COUNTER
C	CEILING MOUNTED DEVICE
NL	NIGHT LIGHT
CLG	CEILING
(R)	RETURN DUCTWORK
(S)	SUPPLY DUCTWORK
ACC	ABOVE ACCESSIBLE CEILING
VEL	VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
+42	DEVICE MOUNTED AT 42 INCHES AFF
AFF	ABOVE FINISH FLOOR
TR	TAMPER RESISTANT
TG	TAMPER GUARD
WG	WIRE GUARD
EWC	ELECTRICAL WATER COOLER
WP/IN USE	METAL WHILE-IN-USE COVER WEATHER PROOF SIMILAR TO EATON WIUMH-1 SERIES
E.C.	ELECTRICAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
ATS	AUTOMATIC TRANSFER SWITCH
X	EXISTING DEVICE TO REMAIN
VEF	VERIFY EXACT LOCATION PRIOR TO ROUGH-IN

DRAWING LIST	
FA-0	SYMBOL LIST AND GENERAL ELECTRICAL NOTES
FA-1	FLOOR PLAN - FIRE ALARM
FA-2	FIRE ALARM RISER DIAGRAM, NOTES AND SCHEDULE



REVISION	BY
BID/PERMIT ISSUE	7-22-15
BID/PERMIT ISSUE	4-20-16
REVIEW ISSUE	5-20-16

DRAWINGS:
SYMBOL LIST AND GENERAL
ELECTRICAL NOTES

McHenry County Government
Workforce Network Board Fire Alarm
500 Russel Court
Woodstock, IL 60098



JOB:	14-027
DATE:	7/22/15
SCALE:	as noted
DRAWN:	MH/JD
CHECKED:	MH/JD/JW

NORTH	SHEET
	FA-0
NORTH	CD'S

© COPYRIGHT CBJ ARCHITECTS P.C. 2014

REVISION	BY
BID/PERMIT ISSUE	7-22-15
BID/PERMIT ISSUE	4-20-16
REVIEW ISSUE	5-20-16

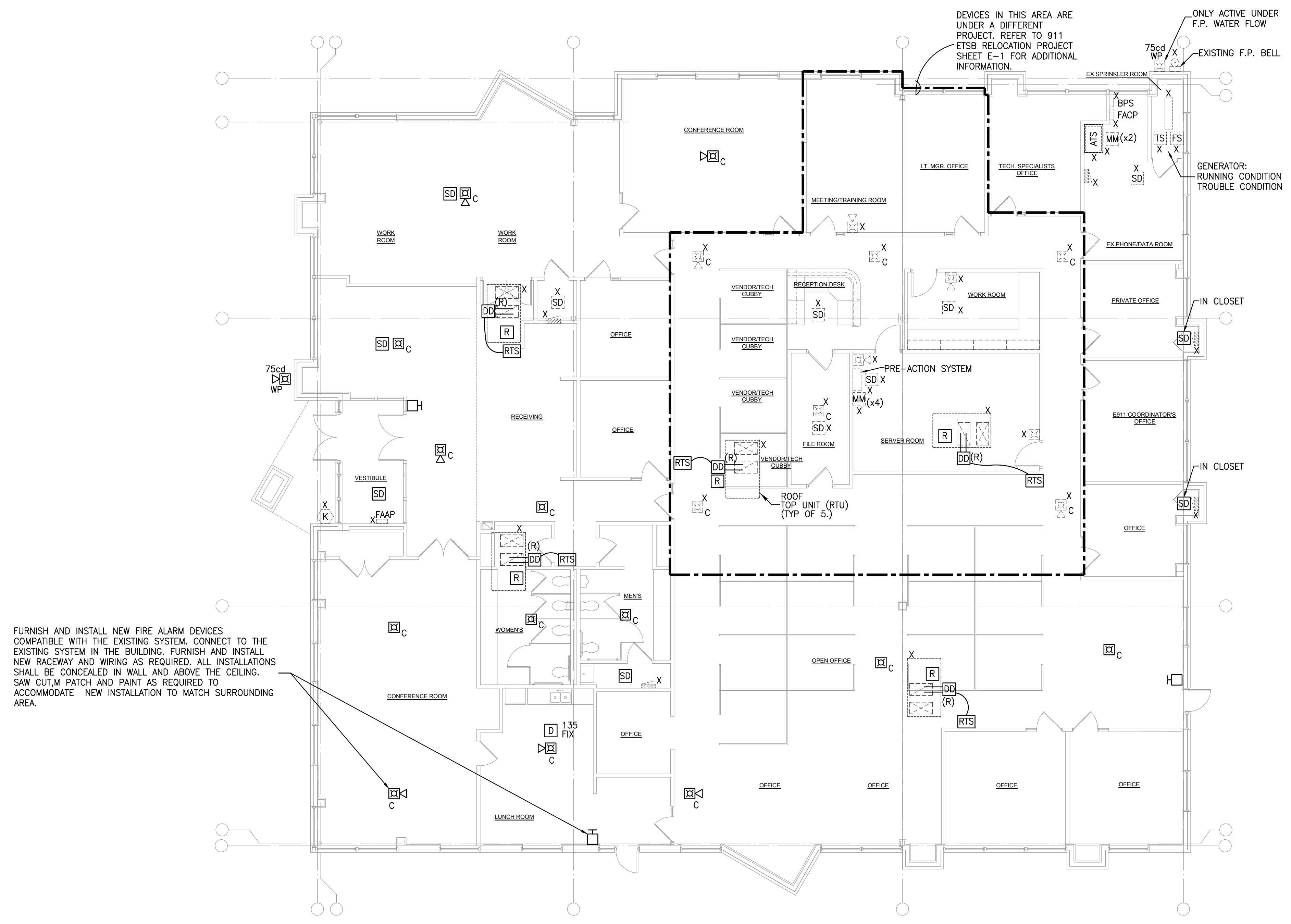
**DRAWINGS:
FLOOR PLAN -
FIRE ALARM**

McHenry County Government
Workforce Network Board Fire Alarm
500 Russel Court
Woodstock, IL 60098

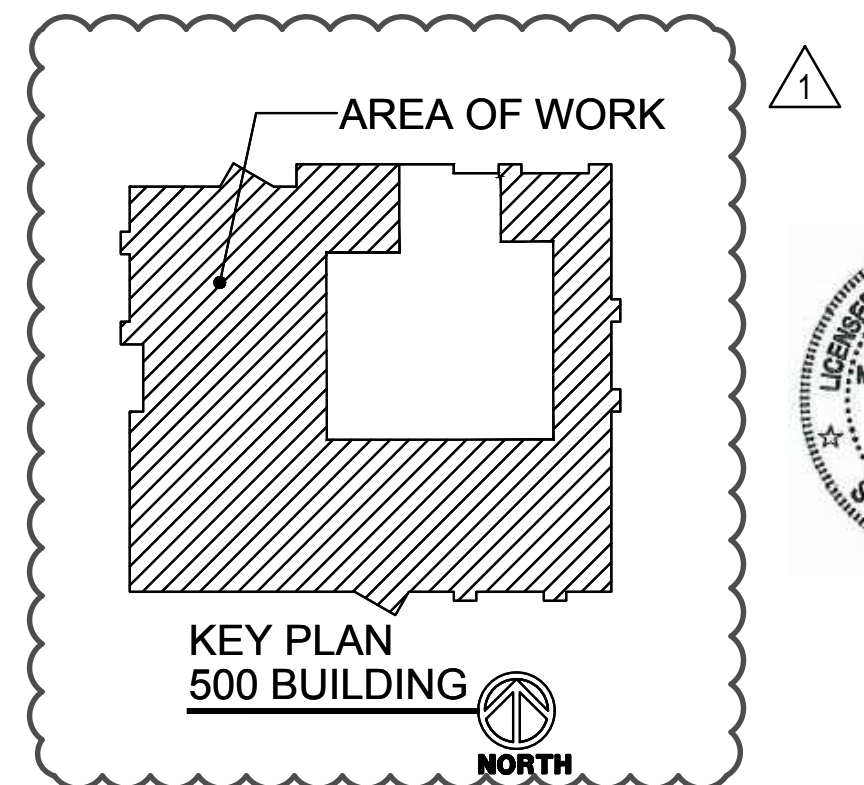


JOB:	14-027
DATE:	7/22/15
SCALE:	as noted
DRAWN:	MH/JD
CHECKED:	MH/JD/JW

NORTH	SHEET
	FA-1
NORTH	CD'S



1 FLOOR PLAN - FIRE ALARM
SCALE: 1/8"=1'-0"
NORTH



© COPYRIGHT CBJ ARCHITECTS P.C. 2014

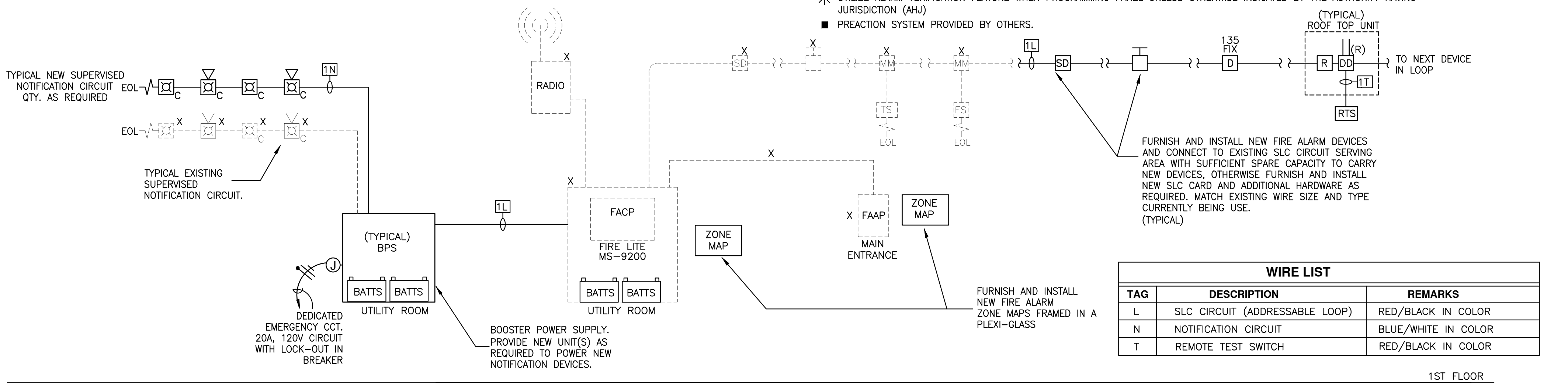
FIRE ALARM SCHEDULE			
SYMBOL	DESCRIPTION	MANUFACTURER	PART#
[FACP]	EXISTING FIRE ALARM CONTROL PANEL.	FIRE LITE	MS-9200 ADDRESSABLE FACP
[FAAP]	EXISTING REMOTE ANNUNCIATOR PANEL		
[BPS]	BOOSTER POWER SUPPLY		PROVIDE EQUIPMENT COMPATIBLE WITH EXISTING SYSTEM
[]	DOUBLE ACTION MANUAL FULL STATION IN RED WITH "FIRE" LETTERING		
[]	MULTI-CANDELA WALL STROBE RED IN COLOR WITH "FIRE" LETTERING.		
[]	MULTI-CANDELA WALL HORN/STROBE RED IN COLOR WITH "FIRE" LETTERING.		
[]	MULTI-CANDELA CEILING STROBE WHITE IN COLOR WITH "FIRE" LETTERING.		
[]	MULTI-CANDELA CEILING HORN/STROBE WHITE IN COLOR WITH "FIRE" LETTERING.		
[SD]	PHOTOELECTRIC SMOKE DETECTOR.		
[D] ¹³⁵ _{FIX}	HEAT DETECTOR. 135F FIXTURE TEMPERATURE		
[DD]	ADDRESSABLE DUCT SMOKE DETECTOR WITH SAMPLING TUBES		
[RTS]	DUCT SMOKE DETECTOR REMOTE KEYED TEST SWITCH		
[R]	ADDRESSABLE RELAY		
[MM]	SINGLE INPUT ADDRESSABLE MODULE		
[2MM]	DUAL INPUT ADDRESSABLE MODULE		
[TS]	FIRE PROTECTION VALVE SUPERVISORY SWITCH (EXISTING)		
[WF]	FIRE PROTECTION WATER FLOW SWITCH (EXISTING)		
EOL	END OF LINE RESISTOR (VALUE AS REQUIRED PER SYSTEM)		
[K]	KNOX BOX (EXISTING)		

FIRE ALARM MATRIX

INITIATING DEVICE	FACP ANNUNCIATION/CONTROL FEATURES										
	ACTIVATE MAIN FACP INDICATOR	ACTIVATE MAIN FACP CABINET COMMON ALARM SIGNAL	ACTIVATE MAIN FACP CABINET AUDIBLE ALARM SIGNAL	ACTIVATE MAIN FACP CABINET COMMON SUPERVISORY SIGNAL	ACTIVATE MAIN FACP CABINET COMMON TROUBLE	ACTIVATE AUDIBLE ALARM NOTIFICATION DEVICES	DISPLAY VISUAL ALARM NOTIFICATION DEVICES	TRANSMIT ALARM SIGNAL	TRANSMIT ALARM SIGNAL	INITIATE HVAC FIRE SEQUENCE (SHUT DOWN)	ACTIVATE STROBE NEXT TO FIRE SPRINKLER BELL
SMOKE DETECTOR *	X	X				X	X	X	X		
HEAT DETECTOR	X	X				X	X	X	X		
HVAC MECHANICAL UNIT DUCT SMOKE DETECTOR *			X	X			X	X	X	X	
FIRE PROTECTION VALVE SUPERVISORY SWITCH			X	X			X	X	X		
FIRE PROTECTION WATER FLOW SWITCH	X	X				X	X	X	X		X
■ PRE-ACTION SYSTEM (PRE-ALARM)			X	X			X	X	X		
■ PRE-ACTION SYSTEM (ALARM)	X	X				X	X	X	X		
■ PRE-ACTION SYSTEM (SUPERVISORY)			X	X			X	X	X		
■ PRE-ACTION SYSTEM (TROUBLE)					X	X		X	X		
ABNORMAL SWITCH OR CONTROL POSITION			X	X			X	X	X		
OPEN CIRCUIT, SHORT CIRCUIT, GROUND FAULT			X	X			X	X	X		
FACP AC POWER FAILURE			X	X			X	X	X		
FACP LOW BATTERY			X	X			X	X	X		
KNOX BOX			X	X			X	X	X		

FIRE ALARM GENERAL NOTES - EXISTING SYSTEM

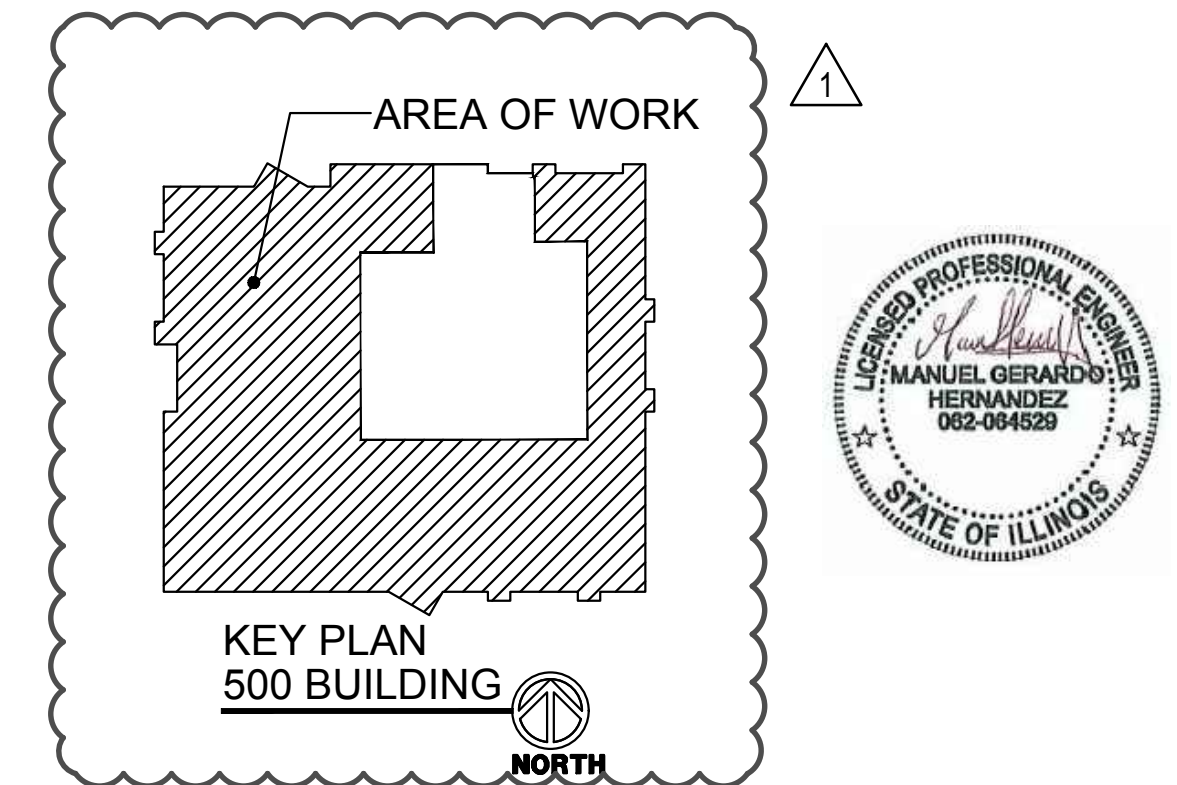
- CERTIFY EXISTING FIRE ALARM SYSTEM PRIOR TO TOUCHING. PROVIDE PAPER WORK TO THE OWNER AND ARCHITECT/ENGINEER INDICATING THE EXISTING CONDITIONS. BRING TO THE OWNER'S ATTENTION AND TO THE ARCHITECT/ENGINEER ANY EXISTING COMPONENTS/PART OF THE SYSTEM CURRENTLY NOT WORKING. IF THIS PAPERWORK IS NOT PRESENTED PRIOR TO TOUCHING THE SYSTEM, THE CONTRACTOR IS ACKNOWLEDGING THAT THE SYSTEM IS 100% OPERATIONAL AND WILL BE HELD RESPONSIBLE FOR ANY NOT WORKING DEVICES LATER ON.
- CONTRACTOR IS RESPONSIBLE FOR CORING, FIRESTOPPING, DRYWALL CUTTING AND PATCHING, PAINTING, CEILING REPAIR, CLEANING, RESTORATION OF ALL FINISHES IN ALL AREAS AFFECTED BY WORK ETC. IF PAINTING IS NEEDED, CONTRACTOR TO PAINT ENTIRE WALL AFFECTED BY PATCHING, NOT JUST PATCHED AREA, IN COLOR AND FINISH TO MATCH EXISTING.
- CONTRACTOR SHALL PATCH FIRE PROOF ALL PENETRATIONS MADE THRU WALLS AND FLOORS FOR THE INSTALLATION OF HIS/HER WORK TO RE-ESTABLISHED THE ORIGINAL FIRE RATINGS OF COMPARTMENTS.
- FURNISH AND INSTALL NEW FIRE ALARM DEVICES AS INDICATED IN THIS SET OF DRAWINGS. NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM. CONNECT NEW DEVICES TO THE EXISTING FIRE ALARM SYSTEM SERVING THE BUILDING. FURNISH AND INSTALL ADDITIONAL HARDWARE AS REQUIRED TO ACCOMMODATE THE EXPANSION OF THE SYSTEM.
- EXISTING FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES DURING THE INSTALLATION OF THE NEW DEVICES. AT NO TIME SHALL THE BUILDING BE LEFT UNPROTECTED. IF EXISTING FIRE ALARM SYSTEM NEEDS TO BE TEMPORARILY DOWN OBTAIN WRITING AND SIGNED AUTHORIZATION PAPER WORK FROM THE OWNER OR THE OWNER'S REPRESENTATIVE OF THE BUILDING AND COORDINATE WITH THE FIRE DEPARTMENT FOR ARRANGEMENTS SO AS TO HAVE A FIRE WATCH PERSON IN THE BUILDING. DOWN TIME SHALL BE LIMITED TO A MAXIMUM OF 8 HOURS DURING REGULAR BUSINESS HOURS 7:30AM-4:30PM MON-FRI (UNLESS OTHERWISE INDICATED).
- FURNISH AND INSTALL NEW FIRE ALARM NOTIFICATION DEVICE(S) AND CONNECT TO NEW BOOSTER POWER SUPPLY (QUANTITY AS REQUIRED). PROVIDE NOTIFICATION DEVICES ARE ALL SYNCHRONIZED. FURNISH AND INSTALL NEW SMOKE DETECTOR(S) IN ROOM(S) HOUSING NEW BOOSTER(S) IF THERE IS NOT AN EXISTING SMOKE DETECTOR.
- SET THE CANDELA RATING IN THE VISUAL NOTIFICATION DEVICES AS REQUIRED BY CODE OR AS REQUIRED TO COVER THE SPACE IN WHICH THE DEVICE ARE INSTALLED.
- CONTRACTOR SHALL REPLACE EXISTING BATTERIES AS REQUIRED TO CONTINUE PROVIDING CURRENTLY STANDBY AND ALARM TIME AFTER THE ADDITION OF THE NEW FIRE ALARM DEVICES AND HARDWARE.
- ALL BATTERIES INSTALLED SHALL BE NEW. FIELD LABELLED ALL BATTERIES WITH DATE OF MANUFACTURING.
- BATTERY BACK-UP SHALL BE SIZED TO COMPLY WITH CODE REQUIREMENT AND LOCAL AMENDMENTS. PROVIDE BATTERY BACK-UP CAPACITY TO MATCH EXISTING SYSTEM REQUIREMENTS, UNLESS OTHERWISE REQUIRED BY THE AHJ.
- FIRE ALARM CABLE SHALL BE PLENUM RATED AND SHALL BE INSTALLED OPEN ONLY ABOVE LAY-IN CEILINGS. STUB CONDUIT UP TO ABOVE LAY-IN CEILINGS AND UTILIZE J-HOOKS 5'-0" O.C. FOR LOCATIONS OTHER THAN ACCESSIBLE LAY-IN CEILINGS. WIRING SHALL BE INSTALLED IN A DEDICATED RACEWAY SYSTEM. CABLE IN UNFINISHED ROOMS (i.e. MECHANICAL ROOMS, HEAD END PHONE ROOM, LOCKER ROOMS, ETC) SHALL BE INSTALLED IN CONDUIT AND PAINT WITH COLOR TO MATCH SURROUNDING AREA AS REQUIRED.
- ALL JUNCTION BOXES HOUSING FIRE ALARM CABLE SHALL HAVE A RED COVER PLATE. COVER PLATE SHALL HAVE CIRCUIT INFORMATION.
- FIRE ALARM CONTROL RELAYS SHALL BE INSTALLED WITHIN 3'-0" OF EQUIPMENT SERVING.
- NAC FIRE ALARM CIRCUITS SHALL BE CLASS "B". REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- FIRE ALARM AUDIBLE NOTIFICATION SHALL PRODUCED A SOUND LEVEL OF 15dB OVER THE AVERAGE AMBIENT LEVEL.
- SUBMIT SHOP DRAWINGS AND EQUIPMENT BOOKS FOR ENGINEER AND AUTHORITIES HAVING JURISDICTION (AHJ) APPROVAL. SHOP DRAWINGS SHALL INCLUDE BUT NOT BE LIMITED TO: FLOOR PLANS, FIRE ALARM INITIATING DEVICE LIST SHOWING FOR EACH ADDRESSABLE DEVICE IN THE SYSTEM: DEVICE TYPE, LOCATION AND ADDRESSABLE CODE. DETAILS, CIRCUITS AND BATTERIES CALCULATIONS. INFORMATION IN THE LIST SHALL CONCORD WITH FLOOR PLANS, REFER TO SPECIFICATION DOCUMENTS FOR ADDITIONAL INFORMATION.
- ALL NEW FIRE ALARM INITIATING DEVICES AND NOTIFICATION DEVICES SHALL BE LABELED WITH CIRCUIT INFORMATION AND ADDRESSABLE SERIAL CODE AS APPLICABLE.
- UTILIZE WIRING SIZES AND TYPES AS REQUIRED AND RECOMMENDED BY MANUFACTURER. WIRING SHALL BE COLOR CODED. SUBMIT IN SHOP DRAWINGS CABLE LIST INDICATING COLOR CODING CABLE FOR EACH PART OF THE SYSTEM (i.e. RED/BLACK FOR SLC, BLUE/WHITE FOR NOTIFICATIONS CIRCUITS, ETC.).
- NOTIFICATION CIRCUITS VOLTAGE DROP SHALL NOT EXCEED 5% UNLESS OTHERWISE APPROVED BY THE MANUFACTURER OR AHJ.



PARTIAL FIRE ALARM RISER

FIRE ALARM GENERAL NOTES - EXISTING SYSTEM (CONTINUE)

- SLC CIRCUITS SHALL HAVE 20% SPARE CAPACITY FOR FUTURE EXPANSION.
- FURNISH AND INSTALL 20A, 120V DEDICATED CIRCUITS AS REQUIRED FOR CONNECTING NEW FIRE ALARM EQUIPMENT. FURNISH AND INSTALL LOCK-OUT DEVICE IN BREAKER.
- INSTALL WALL MOUNTED NOTIFICATION DEVICES AT 80 INCHES ABOVE THE FINISH FLOOR TO THE LENS, UNLESS OTHERWISE INDICATED.
- SYSTEM PROGRAM SHALL UTILIZE FINAL OWNER APPROVED ROOM NAMES AND NUMBERS. FAILURE TO DO IT SHALL BE THE CONTRACTOR RESPONSIBILITY.
- PROVIDE ZONE MAPS FRAMED IN A PLEXI-GLASS NEXT TO FACP AND FAAP. ZONE MAPS SHALL INDICATE EXISTING AND NEW DEVICES. INCLUDE A DEVICE LIST SHOWING DEVICE CODE AND LOCATION. PROVIDE TWO EXTRA COPIES TO THE OWNER.
- UNDER FIRE ALARM ACTIVATION HVAC EQUIPMENT SHALL SWITCH INTO FIRE ALARM MODE.
- WALL MOUNTED NOTIFICATION DEVICES SHALL BE RED IN COLOR WITH FIRE LETTERING.
- CEILING MOUNTED NOTIFICATION DEVICES SHALL BE WHITE IN COLOR WITH FIRE LETTERING.
- DO NOT REMOVE THE SMOKE CAPS UNTIL CONSTRUCTION HAS FINISHED AND THE BUILDING IS CLEAN. TURN CAPS BACK TO THE OWNER.
- INSTALL FIRE ALARM SMOKE DETECTORS A MINIMUM OF 3 FEET AWAY FROM SUPPLY AIR DIFFUSERS.
- CONTRACTOR SHALL INCLUDE IN HIS/HER BID THE FOLLOWING ADDITIONAL DEVICES AND INCLUDE 50 FEET OF WIRING AND RACEWAY FOR EACH DEVICE, TURN DEVICES TO OWNER AS OWNER STOCK IF DEVICES ARE NOT REQUIRED DURING THE CONSTRUCTION PROCESS:
 - (2) SMOKE DETECTORS.
 - (2) NOTIFICATION DEVICES.
- PROVIDE ALL CLOSE-OUT DOCUMENTATION AS REQUIRED BY SPECIFICATIONS AND NFPA72 IN ORDER TO GRANT OCCUPANCY PERMIT.
- TAPPING OF WIRING WILL BE ONLY ALLOWED AT DEVICE(S) LOCATION, TAPPING AT JUNCTIONS BOXES IS NOT PERMITTED.
- ALL FIRE ALARM BOXES ABOVE THE CEILING SHALL HAVE THEIR COVER PLATES PAINTED RED.
- COORDINATE EXACT LOCATION OF DUCT DETECTOR REMOTE TEST SWITCH WITH THE AHJ BEFORE ROUGHING-IN. ALL SWITCHES SHALL BE LABELED WITH MECHANICAL UNIT SERVING AND DUCTWORK SIDE INFORMATION (i.e. RTU-1/RETURN, RTU-2/RETURN, RTU-3/RETURN, ETC.) LED TEST SWITCH SHALL BE MOUNTED IN THE CEILING OR ON THE WALL AT 60" AFF (REFER TO DRAWINGS FOR LOCATIONS).



REVISION	BY
BID/PERMIT ISSUE	7-22-15
BID/PERMIT ISSUE	4-20-16
REVIEW ISSUE	5-20-16

DRAWINGS:
FIRE ALARM RISER DIAGRAM,
NOTES & SCHEDULE

McHenry County Government
Workforce Network Board Fire Alarm
500 Russel Court
Woodstock, IL 60098



JOB:	14-027
DATE:	7/22/15
SCALE:	as noted
DRAWN:	MH/JD
CHECKED:	MH/JD/JW
SHEET	FA-2
NORTH	CD'S

© COPYRIGHT CBJ ARCHITECTS P.C. 2014

THIS PAGE IS MANDATORY

BID ON

TOTAL LUMP SUM BID AMOUNT: \$ _____

*NOTE: All documents, included in the specifications, MUST ALSO BE FILLED OUT AND INCLUDED WITH SUBMISSION TO BE CONSIDERED RESPONSIVE & RESPONSIBLE.

Estimated start date after receipt of purchase order: # _____ days

Estimated time of completion: # _____ days

THIS PAGE IS MANDATORY

REFERENCES

List three (3) references that you have done similar work, service or supplied similar products to within the last twelve (12) months (Only correct contact names and phone numbers will be acceptable).

Entity:

Address:

City, State, Zip Code:

Telephone Number:

Contact Person:

Entity:

Address:

City, State, Zip Code:

Telephone Number:

Contact Person:

Entity:

Address:

City, State, Zip Code:

Telephone Number:

Contact Person:

THIS PAGE IS MANDATORY.

**RUBBER STAMPED, FAXED, COPIED, OR TYPED SIGNATURE
WILL DISQUALIFY YOUR BID MUST BE AN ORIGINAL
SIGNATURE**

CERTIFICATIONS

Vendor certifies that it has not been barred from contracting with a unit of State or local government as a result of a violation of Section 33E-3 or 33E-4 of the Criminal Code of 1961, as amended. _____ Yes _____ No

Vendor certifies that it is aware that all contracts for the Construction of Public Works are subject to the Illinois Prevailing Wage Act (820 ILCS 130/1-12) _____ Yes
No

Under penalties of perjury, I certify that _____ is my correct Federal Taxpayer Identification Number. I am doing business as a (please check one):

- | | |
|---|--|
| <input type="checkbox"/> Individual | <input type="checkbox"/> Real Estate Agent |
| <input type="checkbox"/> Sole Proprietorship | <input type="checkbox"/> Government Entity |
| <input type="checkbox"/> *Partnership | <input type="checkbox"/> Tax Exempt Organization |
| <input type="checkbox"/> **Corporation | (IRC 501(a) only) |
| <input type="checkbox"/> Not-for-Profit Corporation | <input type="checkbox"/> Trust or Estate |
| <input type="checkbox"/> Medical and Health Care
Services Provider Corporation | |

*State full names, titles and addresses of all responsible principles and/or partners below;

Name: _____ Title: _____

Address: _____

Name: _____ Title: _____

Address: _____

Name: _____ Title: _____

Address: _____

Name: _____ Title: _____

Address: _____

Name: _____ Title: _____

Address: _____

If needed please submit any additional sheets.

PROPOSER'S CERTIFICATION

I have carefully examined the Bid, Scope of Work, Specifications, and any other documents accompanying or made a part of this Bid.

I hereby propose to furnish the goods or services specified in the Bid. I agree that my proposal will remain firm for a period of up to 120 days in order to allow the County adequate time to evaluate the qualifications submitted.

I verify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this Bid on behalf of the firm as its act and deed, and that the firm is ready, willing, and able to perform if awarded the contract.

I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service. No officer, employee or agent of the County of McHenry or any other proposer is interested in said proposal and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

**State of Incorporation _____

(Individual - Partnership - Company - Corporation)

(Business Address)

(City, State and Zip Code)

(By Printed Name and Signature)

(Title)

(Witness Signature)

(Title)

(Telephone No)

(Fax No.)

(Date)

End of Document