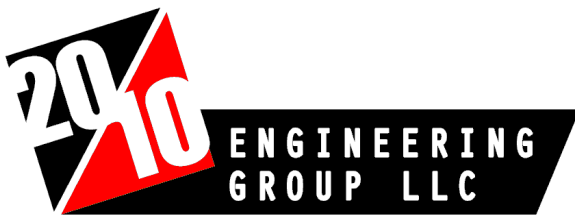


HVAC PROJECT

Will Cotton, Head of Facilities, and Jeff Chamberlain from 20/10 Engineering Group will attend the Board Meeting to discuss the HVAC project.



## **Proposed HVAC Renovation Project Elmhurst Public Library January 15, 2026**

This is a general overview of the proposed HVAC renovation project.

### **(2) Hot Water Heating Boilers Steam Humidification Boiler**

The (2) Hot Water Heating Boilers and the Steam Humidification Boiler are located in the basement boiler room. They were manufactured by Rite and are original to the building, now at the end of their useful life. They are atmospheric gas fired boilers and not particularly efficient. This project will replace them in the same location with new boilers that utilize power burners and have higher efficiency. The new boilers will be “near condensing”, which is the highest efficiency possible without requiring the boiler flue to be replaced, which would be expensive and likely not pay back over the life of the equipment.

### **Air Cooled Water Chiller**

The Air Cooled Water Chiller is located in an outside “well” at the upper level of the building. It was manufactured by Carrier and is original to the building, utilizes a banned refrigerant, and is now at the end of its useful life. This project will replace it with a similar unit utilizing modern refrigerant in the same location. Structural beams that were installed after the original unit was installed will be temporarily removed and replaced after the new chiller is in place.

### **Air Handling Unit No. 5**

Air Handling Unit No. 5 is located on the roof within the extended walls of the north stair tower. It's associated (2) air cooled condensing units are located directly above the unit on steel grating. The equipment was manufactured by Carrier and is original to the building. The air cooled condensing units are beyond the end of their useful life and utilize a banned refrigerant. There is insufficient service area around the equipment as currently installed. Per the current codes, the air cooled condensing units cannot be replaced unless the air handling unit is also replaced, which would be very labor intensive in its current location. Therefore, it is recommended that the existing equipment be replaced with a new packaged heating/cooling rooftop unit with new ductwork tied into the existing ductwork in the upper level ceiling. Since this unit might be visible from the street, it will be provided with visual screening.



## Proposed Project Schedule

This project involves replacement of building heating, cooling, and ventilation equipment. During this work, the systems being replaced will be affected. The proposed schedule is designed to minimize the impact on the operation of the library. The timing of the project will also ensure a number of interested bidders since it falls outside of the busy summer school construction season.

September 1 - October 15: Replace steam and hot water boilers.

This time period will ensure boilers are operational by the typical start of the heating season. Minimal impact to the building since the work is in the basement.

September 15 - October 15: Replace Air Handling Unit No. 5 with new packaged rooftop unit.

The new rooftop unit will be set first with ductwork installed so that the existing air handling unit can remain in operation as long as possible with the only downtime being when the ductwork is tied in. This time period is typically in between cooling and heating season so there should be minimal time when the temperature in the meeting rooms will be affected. There will be some disruption to the upper level north when the ductwork is installed.

November 1 - November 30: Replace air cooled water chiller.

This work will start after the chiller has been shut down for the season. There should be minimal impact to the building.



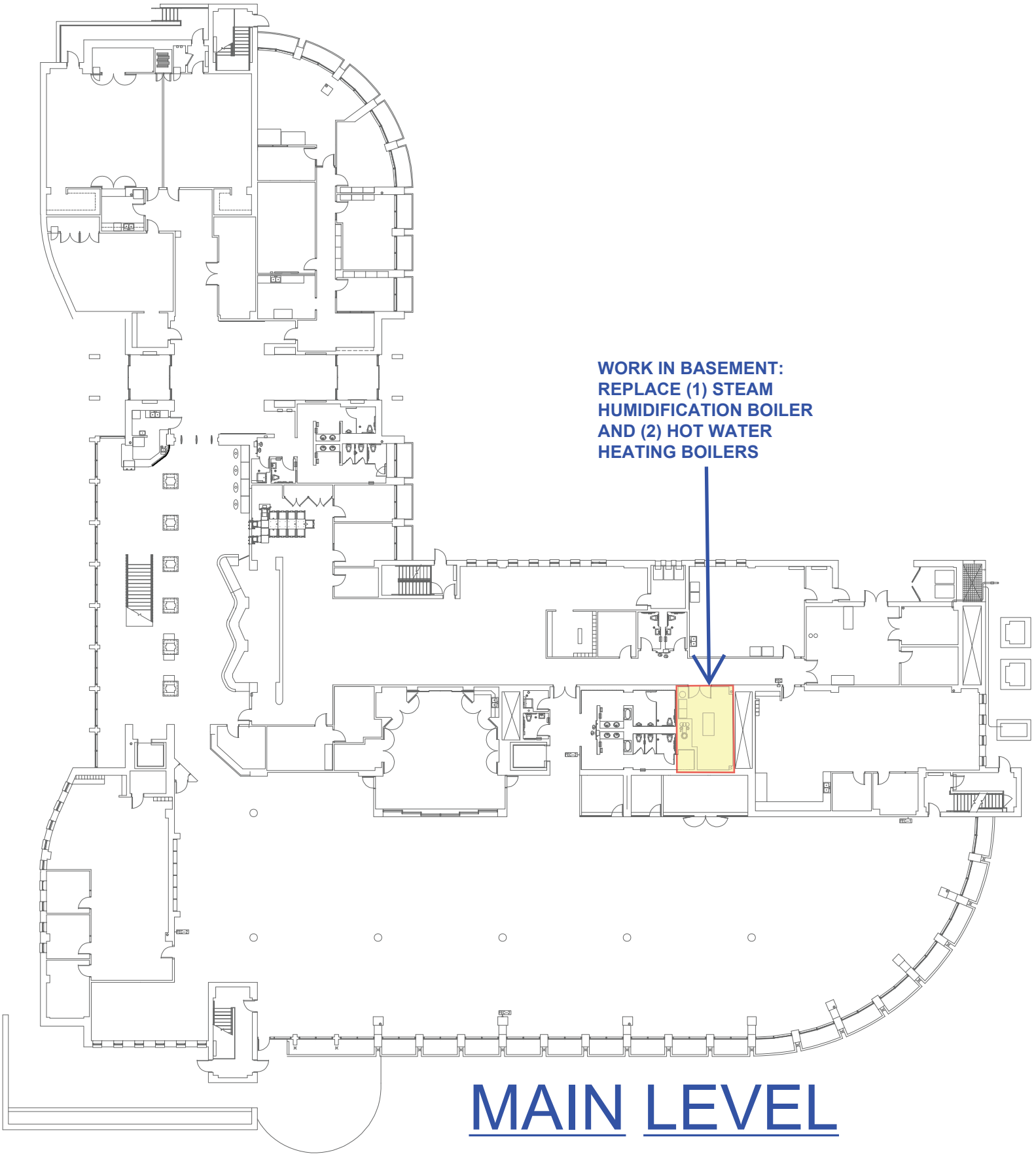
**Air Cooled Water Chiller**



**Hot Water Boiler**

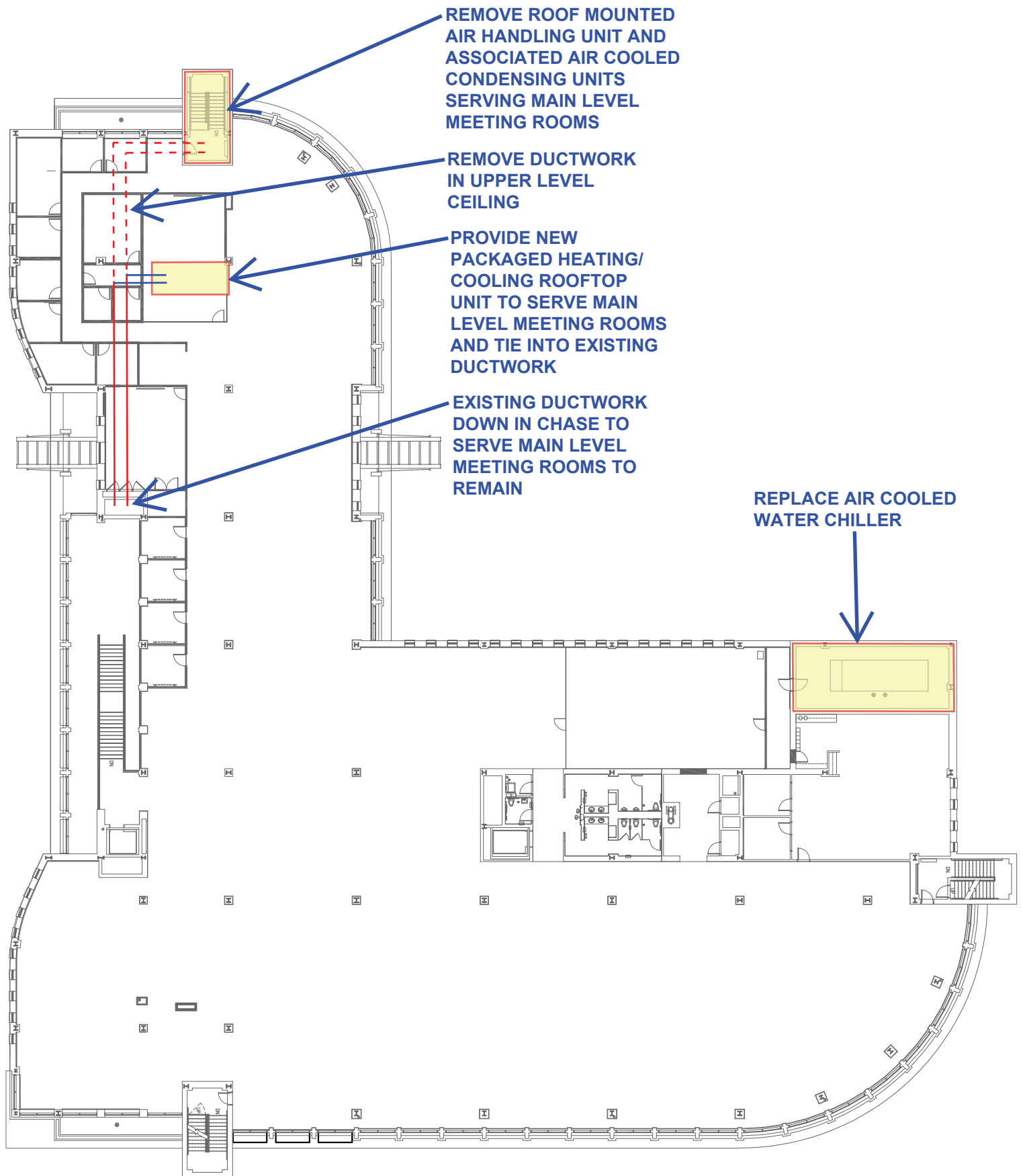


**Air Handling Unit No. 5**

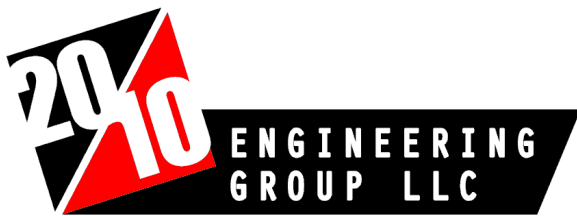


**WORK IN BASEMENT:  
REPLACE (1) STEAM  
HUMIDIFICATION BOILER  
AND (2) HOT WATER  
HEATING BOILERS**

**MAIN LEVEL**



# UPPER LEVEL



July 2, 2025

Will Cotton  
Elmhurst Public Library  
125 S. Prospect Ave.  
Elmhurst, IL 60126

Re: Engineering Proposal  
HVAC Renovation  
Elmhurst Public Library  
Elmhurst, Illinois

Dear Will:

We appreciate the opportunity and are pleased to present the following engineering proposal on the above referenced project. We understand the project to be replacement of Hot Water Boilers B-1 & B-2, Steam Humidification Boiler B-3, Air Cooled Water Chiller CH-1, and Air Cooled Condensing Units CU-1A & 1B along with associated DX cooling coils in existing roof mounted air handling unit AHU-5. Per our site visit and the original building drawings, we anticipate our scope of services to be as follows:

## **I. Scope of Work**

### **A. Structural:**

1. Design and detail the building structural elements related to the support of the existing air cooled water chiller enclosure walls as required to replace the chiller.

### **B. HVAC:**

1. Design heating, ventilating and air conditioning system.
2. Design temperature control system.

### **C. Electrical:**

1. Design electrical system to provide power to HVAC equipment.
2. Design revisions to fire alarm system.

**20/10 Engineering Group, LLC**

1216 Tower Rd, Schaumburg, IL 60173 847.882.2010 fax 847.882.2201

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## **II. Design Services (See Section IV. for fees associated with services listed)**

### **A. Construction Document Phase:**

1. Attend design meetings to discuss system requirements and make recommendations.
2. Visit existing building and survey the existing structural/mechanical/electrical systems for type, condition, capacity, and location of major equipment as well as routing of systems within the project area.
3. Prepare design drawings to include floor plans, details, equipment schedules, etc. for the scope of work as described above in Section I.
4. Prepare front end specifications or assist with your typical bid procurement request for proposal.
5. Prepare mechanical and electrical specifications in book format or on the drawings.

### **B. Bidding/Permit Phase:**

1. Prepare any supplemental drawings in Revit® or AutoCAD® and/or specifications required to clarify the bid documents during bidding or permit review.
2. Attend meeting with permit reviewers, if requested.
3. Contact qualified contractors and encourage them to bid on the project.
4. Conduct pre-bid meeting.
5. Conduct scope review meetings with low bidders.
6. Assist with evaluation of bids received.
7. Prepare letter of recommendation for board approval.

### **C. Construction Phase:**

1. Provide revisions to construction bid documents to create "Issued for Construction" documents incorporating addendums, accepted alternates, etc.
2. Provide revisions to "Issued for Construction" documents in Revit® or AutoCAD® to incorporate post-bid bulletins, RFI field sketches, contractor "as-built" changes, etc. Provide periodic Document Update Sets incorporating all revisions to date when required.
3. Review all product submittals and shop drawings on equipment and systems designed by this office.
4. Provide site observation visits or job meeting attendance on an "as needed" basis.
5. Visit site at time of substantial completion and provide final punch list on work designed by our firm.
6. Visit site after notification from contractor that punchlist has been completed to verify any remaining items.

### III. Additional Services:

- A. Any other scope of work not specifically identified in Section I. or design services not specifically identified in Section II. as being provided by 20/10 Engineering Group shall be considered Additional Services.

### IV. Compensation

#### A. Basic Service Fee:

1. Boiler Replacement Only (Construction Budget Opinion: \$390,000)  
20/10 Engineering Group will provide all services in Section II. for scope of work listed in Section I. for a lump sum of Twenty Two Thousand Dollars (\$22,000.00).
2. Air Cooled Water Chiller Replacement Only (Construction Budget Opinion: \$350,000)  
20/10 Engineering Group will provide all services in Section II. for scope of work listed in Section I. for a lump sum of Nineteen Thousand Dollars (\$19,000.00).
3. Air Cooled Condensing Unit Replacement Only (Construction Budget Opinion: \$150,000)  
20/10 Engineering Group will provide all services in Section II. for scope of work listed in Section I. for a lump sum of Nine Thousand Dollars (\$9,000.00).
4. Any 2 of the above: 20/10 Engineering Group will provide all services in Section II. for scope of work listed for the sum of the basic individual service fees identified above less Two Thousand Dollars (\$2,000.00).

#### B. Reimbursable Expenses:

1. All reimbursable expenses will be billed at 100% of our direct cost or at fair market price if performed in house.
2. Plotting and printing:
  - a. 20/10 Engineering Group will pay for the following:
    - (1) All drawing plotting and drawing/specification printing costs for our in-house use with the exception of interim official milestone design team review sets, bid set, permit set, or construction set.
  - b. Reimbursable expenses will include the following:
    - (1) All costs for drawing plotting and drawing/specification printing for use by others.
    - (2) All plotting/printing costs performed by an outside vendor.
3. All expenses associated with delivery of any project documents beyond normal First Class US Mail will be a reimbursable expense.

#### C. Additional Services:

1. All Additional Services shall be billed on an hourly basis. Reference "Project Hourly Billing Rates" schedule attached.



## V. Billing

- A. Billing will be made monthly for work performed during the previous month. Bills will be prepared on a percentage basis of the basic service fee based on completion level of the project at time of billing in accordance with the following schedule:

<b><u>Phase</u></b>	<b><u>% of Fee</u></b>
Construction Document Phase	75%
Bidding/Permit Phase	5%
Construction Phase	20%

- B. All reimbursable expenses and Additional Services will be billed monthly.

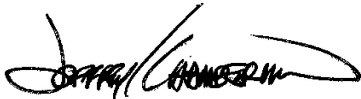
## VI. Acceptance of Engineering Proposal

- A. This proposal letter, when signed and returned to our office within 60 days of the date on the first page, constitutes the full agreement between our firms for engineering services.
- B. We have sent this proposal by email for your review. If you agree with our proposal, please indicate your acceptance by returning one signed copy to our office. We will assign a design team to this project and begin work upon its receipt.

We thank you for asking our firm to submit this engineering proposal and we look forward to working for you on this project.

Sincerely,

20/10 Engineering Group, LLC



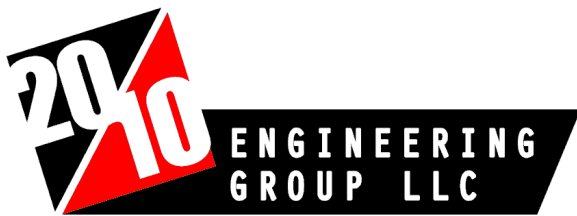
Jeffrey C. Chamberlin, P.E., LEED-AP

### Design Proposal Accepted:

Client Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



**PROJECT HOURLY BILLING RATES**

<b>CLASSIFICATION</b>	<b>HOURLY RATE</b>
Principal	\$195.00
Project Manager	\$175.00
Senior Engineer	\$155.00
Senior Designer	\$140.00
Project Engineer	\$135.00
Project Designer	\$120.00
Junior Engineer	\$110.00
Junior Designer	\$105.00
CAD Operator	\$95.00
CAD Intern	\$90.00
Clerical	\$85.00

The above rates are in effect through the completion of this project.

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