



ACADEMIC VILLAGE COOLING TOWER

INVITATION FOR BID # PSPW-25-10

Issuance of Solicitation: Thursday, July 17, 2025
Questions Due Date: Monday, August 25, 2025
Bid Submission Deadline: Tuesday, September 2, 2025

THE CITY OF PEMBROKE PINES
PROCUREMENT DEPARTMENT
8300 SOUTH PALM DRIVE
PEMBROKE PINES, FLORIDA 33025
(954) 518-9020

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SECTION 1 - NOTICE

Notice is hereby given that the City Commission of the City of Pembroke Pines is seeking sealed proposals for:

IFB # PSPW-25-10

Academic Village Cooling Tower

Solicitations may be found on the City of Pembroke Pines website under the Procurement Department at <http://www.ppines.com/index.aspx?NID=667>, and may be downloaded directly from the OpenGov platform at <https://procurement.opengov.com/portal/pembrokepines>.

For Technical Support, proposers can reach the OpenGov Service Desk between 7:00 am to 10:00 pm from Monday through Friday via the following methods:

- Chat (preferred method): Click the button in the lower right-hand corner of the portal.
- E-mail: procurement-support@opengov.com
- Phone: 1 (650) 336-7167

If additional help is needed with downloading the solicitation package please contact the Procurement Department at (954) 518-9020 or by email at purchasing@ppines.com. The Procurement Department hours are between 7:00 am to 6:00 pm on Monday through Thursday and is located at 8300 South Palm Drive, Pembroke Pines, FL 33025.

Bidders shall submit all questions regarding this bid via the City's e-Procurement Portal, located at <https://procurement.opengov.com/portal/pembrokepines>. Please note the deadline for submitting questions. All answers will be posted on the City's e-Procurement Portal. Bidders may also click "Follow" on this bid to receive an email notification when answers are posted. It is the bidder's responsibility to check the portal for updates. Only written responses issued through the OpenGov platform will be considered official for interpretations or clarifications.

Proposals will be accepted until 2:00 pm on Tuesday, September 2, 2025, electronically at <https://procurement.opengov.com/portal/pembrokepines/projects/175682>.

Bid Opening: The sealed electronic proposals will be publicly opened at 2:30 pm, on the bid due date, by the City Clerk's Office, in the **City Clerk's Office Conference Room located on the 4th Floor in the Charles F. Dodge City Center**/City Hall Administration Building, located at 601 City Center Way, Pembroke Pines, Florida, 33025.

Virtual Bid Opening: In light of public health concerns and to ensure accessibility for all, the City encourages interested parties and the public to participate virtually via live streaming instead of attending the meeting in person. As a result, meetings may be a combination of in-person and virtual, all as provided by law. To virtually attend the bid opening, please use the Cisco Webex Meetings platform.

Virtual Meeting Details:



- WebEx Meeting Link: <https://ppines.webex.com/meet/purchasing>
- Cisco Webex Meeting Number: 717 019 586
- Join by Phone Number: +1-408-418-9388

The public may download the **Cisco Webex Meetings app** from <https://www.webex.com/downloads.html/>.

To ensure an efficient meeting process, participants are requested to mute their audio and camera during the meeting. While the public is welcome to attend the virtual bid opening, **please note that active participation and commenting will not be allowed during the proceedings.**

For further information about the bid opening or assistance in accessing the virtual meeting, please contact:

Ivan Ospinal or other Procurement Staff in the Procurement Department
City of Pembroke Pines
8300 South Palm Drive,
Pembroke Pines, FL 33025
(954) 518-9020 or 954-518-9020
purchasing@ppines.com

SECTION 2 - GENERAL PROJECT INFORMATION & TIMELINE

2.1 Project Timeline

The work shall be completed within **75 Days** calendar days from issuance of the City's Notice to Proceed (NTP), with an estimated start date of **TBD**.

2.2 Tentative Schedule of Events

Issuance of Solicitation (Posting Date):	July 17, 2025
Pre-Bid Meeting (Mandatory):	July 24, 2025, 10:00am Pembroke Pines Charter School, Academic Village Campus 17189 Sheridan Street, Pembroke Pines, FL 33331
Question Due Date:	August 25, 2025, 11:00pm
Issuance of Final Answers to Questions:	August 27, 2025
Bid Submission Deadline:	September 2, 2025, 2:00pm
Bid Opening:	Will be held at 2:30 pm on the day of bid submissions are due.
Evaluations by Staff:	To Be Determined (TBD)

2.3 Mandatory Pre-Bid Meeting/Site Visit

There will be a **MANDATORY** scheduled pre-bid meeting on **Thursday, July 24, 2025 at 10:00 am**. Meeting location will be at the **Pembroke Pines Charter School, Academic Village Campus 17189 Sheridan Street, Pembroke Pines, FL 33331**

- A. **Proof of Attendance:** Contractors may be required to sign in at any of the meetings to show proof of attendance. It is the Contractor's responsibility to make sure that they sign in at the meeting.

2.4 Follow-Up Pre-Bid Meeting(s)

Follow-Up Meetings: In the event that a Contractor cannot attend the scheduled pre-bid meeting, or if a Contractor would like a follow up visit to the site, they may request a site visit by contacting **Ivan Ospinal** at **(954) 518-9020**. We urge all Contractors to attend the scheduled meeting, as a separate or follow-up meeting may not be afforded to the requester due to scheduling

and availability of staff to assist with any additional meetings. In addition, if making a request for a separate or follow-up meeting, Contractors are urged to make these requests as early as possible.

2.5 Estimated Project Cost

Staff estimates this project to cost approximately \$448,000.

2.6 Liquidated Damages

Liquidated damages for this project shall be **FIVE HUNDRED DOLLARS AND NO CENTS (\$500.00)** per day.

2.7 Grant/Federal Funding

Yes, the City plans to utilize the following grant(s)/federal fund(s) for this project:

U.S. Department of Energy (DOE) - Energy Efficiency and Conservation Grant Program (EECG)

2.8 Proposal Security/Bid Bond

A Proposal Security shall be required for every bidder, regardless of proposal amount. Proposal Security shall be in the amount of \$10,000 or 5% of the total cumulative base amount proposed, whichever is less.

2.9 Payment and Performance Bonds

In the event that the awarded contract, not including owner's contingency, exceeds \$200,000, two (2) separate bonds (Payment & Performance Bonds) are required, and both must be approved by the City. The penal sum stated in each bond shall be 100% of the contract price.

2.10 Permit, License, Impact or Inspection Fees

With the exception of the City related permit, license, impact or inspection fees (including the Building Department and Engineering Department Permit Fees), which will be waived for this project, the City does not anticipate any additional permit, license, impact or inspection fees for this project. Any related State or County fees, for the aforementioned permits, will be paid by the City.

In addition, the City shall cover the cost for any other permit fees related to external entities through the City's Owner's Contingency for this project, **therefore proposers should not include permit costs in their total proposal price.**

Furthermore, please note the City's average time for a Contractor to apply for and receive an approved permit is 30 days; delays in this timeline caused by the Contractor's failure to actively monitor the permit process and submit all required documentation in a timely manner, will count against the project's contractual completion period.

SECTION 3 - PURPOSE AND BACKGROUND

3.1 Purpose

The City of Pembroke Pines is seeking bids from qualified firms, hereinafter referred to as the Contractor, to furnish all labor, equipment, and materials, for the demolition and installation of a new cooling tower at the Pembroke Pines Charter School Academic Village Campus, in accordance with the terms, conditions, and specifications contained in this solicitation.

Cooling towers play a critical role in the HVAC system by removing heat from the building and maintaining efficient system operation. Their proper function is essential to ensure continuous cooling across the campus and prevent disruptions to the HVAC infrastructure.

The Pembroke Pines Academic Village campus cooling towers have reached the end of their useful life due to corrosion and aging components, impacting performance and reliability. Replacing them with modern stainless-steel units will enhance efficiency, ensure safety, and provide dependable service for decades with proper maintenance.

3.2 Background

Pembroke Pines, Florida, ranked as the eleventh largest city among the state's four hundred plus municipalities and the second largest in Broward County, maintains a welcoming small-town ambiance that resonates with its residents. Located conveniently in southwest Broward County, the city provides seamless access to major highways, employment centers, entertainment venues, parks, golf courses, and a diverse array of dining and shopping options.

With a population of approximately 170,000 residents spread across 32.68 square miles, Pembroke Pines is renowned as one of the best cities to live in America. The city boasts 28 superior parks, lush landscaping, and a distinctive South Florida charm that contributes to its natural beauty. Notably recognized as 2024's Best Place to Raise a Family in Florida, and 2024's Best City of Hispanic Entrepreneurs by WalletHub, Pembroke Pines also earned a place as the on Money Magazine's esteemed Best Places to Live list in 2014, as the sole Florida representative, ranking in at #32 in the nation.

Incorporated in 1960, Pembroke Pines is celebrated as a safe and desirable community, having received accolades such as the All-America City designation. The city's commitment to arts and culture, exceptional schools, diverse population, numerous parks, and forward-thinking approach in an ever-evolving world make it a standout destination.

Pembroke Pines is also the home to the largest municipal-run charter school system in the nation, serving over 6,000 students across five separate campuses. The City's award-winning charter school system is located in the Broward County School District, which is the sixth largest school district in the nation.

SECTION 4 - SCOPE OF WORK

4.1 General Summary

Below are the general requirements to participate in this bid. The list is not intended to be all inclusive. Please refer to Attachment A and Attachment B in conjunction to the requirements outlined in this bid package for a complete scope of work.

The project involves the following generalized descriptions of work:

1. General Requirements
2. Demolition
3. Equipment
4. New Installation
5. Repairs

4.2 General Requirements

- A licensed General Contractor with a minimum of five (5) years of experience is required for this project.
- The City provides permit-ready plans. All other documents, plans, submittals, special inspections, and required certificates (including NOA's for permits) are the contractor's responsibility.
- The contractor is responsible for acquiring all necessary permits, performing testing, and ensuring manufacturer and contractor warranties and certifications are provided.
- The contractor must provide weekly progress updates and submit fire sprinkler shop drawings for permit review and approval by the Authority Having Jurisdiction (AHJ).
- All work must comply with governing code requirements.
- Background checks will be required for school access.
- A competent, English-speaking superintendent must be present on-site during the work. All decisions made by the superintendent are binding.
- The contractor must ensure all debris is removed and areas damaged during construction are restored to their original or better condition.
- The site must be made safe in accordance with OSHA standards, and all debris must be cleaned up at the end of each workday
- Precautions must be taken to ensure the safety of people, vehicles, and structures on the site.

- Temporary fencing, landscaping, concrete, and other necessary items may need to be removed or reinstalled for access.
- The contractor may set up temporary containers for storage.

4.3 Demolition

- Coordinate timing and logistics with the Facility Management the time frame and schedule available for system shut down.
- Disconnect existing condenser water supply and return piping at a location near the building wall.
- Disconnect existing make up water piping at a point upstream of the existing water meter and ahead of the existing shut off valve.
- Remove all existing drain and overflow piping.
- Remove all existing sump equalization piping.
- Disconnect all existing electrical wiring serving cooling tower motors.
- Remove the cooling tower fan motors and return these to the facility manager.
- Remove existing cooling towers and leave the space open and ready to accept the new equipment. Contractor is responsible for all necessary crane service, rigging, transport of towers to disposal site, and disposal fees.

4.4 Equipment

Please refer to attachment A - Cooling Tower Specifications & Instructions

Please refer to attachment B - Plans

4.5 New Installation

- The mechanical contractor will be responsible for all necessary crane services, rigging, and transport of new cooling towers to the project. Delivery of the new cooling towers is to be closely coordinated with the facility manager.
- The mechanical contractor is responsible for all permitting of the new work. This includes permit fees and processing.
- See attached document for specifications of new cooling towers. All accessories listed are to provided in addition to new variable frequency drives and motor shaft grounding rings for the two new motors.

- Existing concrete structure is to be re-used including any necessary structural modifications as indicated in the structural engineering drawings. New cooling towers are heavier than the existing ones due to higher wind load resistance.
- New cooling towers are to be placed on the concrete structure in similar fashion to existing. Cooling tower footprint will not change.
- Existing condenser water pumps, located adjacent to the cooling towers, will remain for continued use.
- Provide new condenser water return piping starting at the building wall. Provide new piping appurtenances in return piping including shut off valves, balancing valves, and flexible connectors for each tower inlet connection.
- Existing condenser water supply piping is to remain for continued use. Existing appurtenances in condenser water supply piping are to remain for continued use.
- Provide new 4" cooling tower drain, 4" overflow, and 12" sump equalizing piping. Provide new isolation valve in sump equalizing piping.
- Provide new 1" type "L" copper make up water piping to each cooling tower. Provide new shut off valves and flex connectors accordingly.
- Install new variable frequency drives inside the existing mechanical room in location coordinated with facility manager. Provide all load and line side wiring and conduit as required.
- Cooling tower fan speed is to be controlled based on sump temperature. Provide new temperature sensors and necessary interconnection of these and new VFDs to existing TRANE building management system.
- The contractor shall include concrete restoration work as noted on attachment B - Plans.

4.6 Repairs

- Any damage to walls, floors, or other areas affected by construction must be repaired to their original or better condition.

SECTION 5 - PRICE PROPOSAL / BID TABLE

The vendor must provide their pricing electronically through the designated line items listed on the Bid Sheet/Pricing Table via the City's e-Procurement portal on OpenGov.

Vendor Notes: The bid tables include a “Vendor Notes” column for any additional comments regarding the requested line item(s). A comment is preferred in the “Vendor Notes” column. If the vendor does not need to submit any comments, they may leave it blank or enter N/A or similar.

Payment & Performance Bonds: The table includes a section for the vendor to submit pricing for Payment & Performance Bonds. If the total cumulative base proposal amount does not exceed \$200,000 and a Payment and Performance Bond is not required, please enter “0” on the “If Applicable, Cost for Payment and Performance Bond” column for each line item.

Primary Responses: The initial Bid Table is for the primary responses so that the vendors can submit the requested goods and/or services.

Additional Responses: The second Bid Table allows for bidders to submit alternative options. Substitutions of brands or products must be submitted as an alternative for the City’s review and approval.

- A. To submit an alternative, please clearly identify any brand or product substitutions in the “Vendor Notes” column for the respective part.
- B. In addition, please upload any pertinent information relating to the alternative in the "Alternatives" section of the SUBMITTAL DOCUMENTS.

PRIMARY RESPONSE

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	Vendor Notes
1-1	Lump Sum Cost for Turnkey Demolition & Installation	1	Lump Sum			
TOTAL						

ALTERNATE RESPONSE

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	Vendor Notes
2-1	Lump Sum Cost for Turnkey Demolition & Installation (Alternate)	1	Lump Sum			



Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	Vendor Notes
TOTAL						

PAYMENT & PERFORMANCE BOND

Line Item	Description	Unit of Measure	Percentage
3-1	Cost to provide a Payment & Performance Bond for the project, in the form of a percent	Percent	

SECTION 6 - SUBMITTAL DOCUMENTS

Bids must be submitted electronically at <https://procurement.opengov.com/portal/pembrokepines> on or before **2:00 pm on Tuesday, September 2, 2025**. Please note vendors should be registered on OpenGov under the name of the organization that they are operating as and it should match the organization name on the documents that they are submitting and utilizing when responding to the solicitation. In addition, the vendor must complete the required documents in this section and provide any additional information requested throughout this solicitation. Any additional information requested in the solicitation should be scanned and uploaded. The City recommends for proposers to submit their proposals as soon as they are ready to do so. Please allow ample time to submit your proposals on the <https://procurement.opengov.com/portal/pembrokepines> website. Proposals may be modified or withdrawn prior to the deadline for submitting Proposals.

PLEASE DO NOT SUBMIT ANY PROPOSALS VIA MAIL, E-MAIL OR FAX.

Prospective proposers interested in responding to this solicitation are requested to provide all of the applicable information listed in this section. Submittals that do not respond completely to all of the requirements specified herein may be considered non-responsive and eliminated from the process. Brevity and clarity are encouraged.

1 CONFIRMATION TO BIND

- 1.1 I certify that I have read, understood and agree to the terms in this solicitation, and that I am authorized to submit this response on behalf of my company.*

☐ Please confirm

*Response required

2 CERTIFICATION OF INSURANCE COMPLIANCE AND INTENT TO PROCURE REQUIRED COVERAGE

NOTE: Vendors are not required to purchase any additional insurance in order to submit a bid. However, they must certify that they either currently hold, or are able and willing to obtain, all required insurance coverages, endorsements, and limits prior to award and execution of the contract.

- 2.1 I certify that, if awarded this contract, I will be required to obtain and maintain all insurance policies as detailed in the INSURANCE REQUIREMENTS Section of this solicitation before any work may commence, and throughout the life of the contract.*

☐ Please confirm

*Response required

- 2.2 Do you confirm that you will only use insurance carriers licensed to do business in the State of Florida and rated no less than "A" as to management, and no less than "Class VI" as to financial strength by A.M. Best, and that you understand all endorsements required (e.g., Additional Insured, Waiver of Subrogation, etc.) must be included?*

☐ Yes

☐ No

*Response required

2.3 Do you currently carry insurance policies that meet or exceed the minimum requirements outlined in the INSURANCE REQUIREMENTS section of this solicitation?*

☐ Yes

☐ No

*Response required

When equals "Yes"

2.3.1 Please upload your current certificate(s) of insurance that demonstrate compliance with the insurance requirements outlined in this solicitation.*

*Response required

When equals "No"

2.3.2 Please upload documentation showing that you have obtained a letter from your insurance broker or carrier, such as a Letter of Intent to Insure, Evidence of Insurability, or a Conditional Certificate of Insurance.*

Documentation should show that:

- You can obtain the required insurance.
- The limits and types of coverage will meet the INSURANCE REQUIREMENTS outlined in the solicitation.
- You will provide a COI upon contract award.

*Response required

When equals "No"

2.3.3 Please upload your current certificate(s) of insurance.*

*Response required

2.4 Do you believe you are exempt from one or more insurance requirements (e.g., Workers' Compensation)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

2.4.1 Please upload written documentation requesting an exemption on your company letterhead, subject to City approval.*

*Response required

2.5 Do you plan on using subcontractors for this project?*

☐ Yes

☐ No

*Response required

When equals "Yes"

2.5.1 Do you acknowledge that all subcontractors must also carry the same insurance or be covered under your policy, and that proof of such coverage must be provided to the City?*

☐ Yes

☐ No

*Response required

3 REFERENCE # 1

The minimum experience for this project is **five (5) years**. Provide specific examples of similar experience conducting licensed work of equal or similar scope of work, preferably delivered by the proposed team members. A **minimum of 3** references should be from the last **five years** and should be capable of explaining and confirming your firm's capacity to successfully complete the scope of work outlined herein. As part of the proposal evaluation process, the City may conduct an investigation of references, including a record check or consumer affairs complaints. Proposers' submission of a proposal constitutes acknowledgment of the process and consent to investigate. The City is the sole judge in determining Proposers qualifications. In this section you will have the ability to enter information for 5 different references including their contact details and specific project information.

Please note that the City prefers references who are not current employees of the City of Pembroke Pines, as we generally do not contact our own employees for reference checks.

Proposers are advised to confirm that:

- A. Each reference provided by the Respondent has up to date contact persons and contact information;
- B. The contact person provided for each reference is someone who has personal knowledge of the Proposer's performance during the referenced project; and
- C. The contact person for each reference has been contacted by the Proposer regarding this specific bid submittal and such person confirmed their willingness to serve as a reference.

3.1 Reference Contact Information - Name of Firm, City, County or Agency*

*Response required

3.2 Reference Contact Information - Reference's Business Address*

*Response required

3.3 Reference Contact Information - Reference's Contact Name & Title*

*Response required

3.4 Reference Contact Information - Reference's E-mail Address*

*Response required

3.5 Reference Contact Information - Reference's Phone Number*

*Response required

3.6 Project Information - Was your firm the prime contractor for the listed project?*

☐ Yes

☐ No

*Response required

3.7 Project Information - Name of Contactor Performing the Work*

*Response required

3.8 Project Information - Name and location of the project*

*Response required

3.9 Project Information - Nature of the firm's responsibility on the project and work for which staff was responsible for*

*Response required

3.10 Project Information - Project Duration*

*Response required

3.11 Project Information - Completion (Anticipated) Date*

*Response required

3.12 Project Information - Size of Project*

*Response required

3.13 Project Information - Cost of Project*

*Response required

4 REFERENCE # 2

4.1 Reference Contact Information - Name of Firm, City, County or Agency*

*Response required

4.2 Reference Contact Information - Reference's Business Address*

*Response required

4.3 Reference Contact Information - Reference's Contact Name & Title*

*Response required

4.4 Reference Contact Information - Reference's E-mail Address*

*Response required

4.5 Reference Contact Information - Reference's Phone Number*

*Response required

4.6 Project Information - Was your firm the prime contractor for the listed project?*

☐ Yes

☐ No

*Response required

4.7 Project Information - Name of Contactor Performing the Work*

*Response required

4.8 Project Information - Name and location of the project*

*Response required

4.9 Project Information - Nature of the firm's responsibility on the project and work for which staff was responsible for*

*Response required

4.10 Project Information - Project Duration*

*Response required

4.11 Project Information - Completion (Anticipated) Date*

*Response required

4.12 Project Information - Size of Project*

*Response required

4.13 Project Information - Cost of Project*

*Response required

5 REFERENCE # 3

5.1 Reference Contact Information - Name of Firm, City, County or Agency*

*Response required

5.2 Reference Contact Information - Reference's Business Address*

*Response required

5.3 Reference Contact Information - Reference's Contact Name & Title*

*Response required

5.4 Reference Contact Information - Reference's E-mail Address*

*Response required

5.5 Reference Contact Information - Reference's Phone Number*

*Response required

5.6 Project Information - Was your firm the prime contractor for the listed project?*

☐ Yes

☐ No

*Response required

5.7 Project Information - Name of Contactor Performing the Work*

*Response required

5.8 Project Information - Name and location of the project*

*Response required

5.9 Project Information - Nature of the firm's responsibility on the project and work for which staff was responsible for*

*Response required

5.10 Project Information - Project Duration*

*Response required

5.11 Project Information - Completion (Anticipated) Date*

*Response required

5.12 Project Information - Size of Project*

*Response required

5.13 Project Information - Cost of Project*

*Response required

6 REFERENCE # 4

6.1 Reference Contact Information - Name of Firm, City, County or Agency

6.2 Reference Contact Information - Reference's Business Address

6.3 Reference Contact Information - Reference's Contact Name & Title

6.4 Reference Contact Information - Reference's E-mail Address

6.5 Reference Contact Information - Reference's Phone Number

6.6 Project Information - Was your firm the prime contractor for the listed project?

☐ Yes

☐ No

6.7 Project Information - Name of Contactor Performing the Work

6.8 Project Information - Name and location of the project

6.9 Project Information - Nature of the firm's responsibility on the project and work for which staff was responsible for

6.10 Project Information - Project Duration

6.11 Project Information - Completion (Anticipated) Date

6.12 Project Information - Size of Project

6.13 Project Information - Cost of Project

7 REFERENCE # 5

- 7.1 Reference Contact Information - Name of Firm, City, County or Agency
- 7.2 Reference Contact Information - Reference's Business Address
- 7.3 Reference Contact Information - Reference's Contact Name & Title
- 7.4 Reference Contact Information - Reference's E-mail Address
- 7.5 Reference Contact Information - Reference's Phone Number
- 7.6 Project Information - Was your firm the prime contractor for the listed project?
 - ☐ Yes
 - ☐ No
- 7.7 Project Information - Name of Contactor Performing the Work
- 7.8 Project Information - Name and location of the project
- 7.9 Project Information - Nature of the firm's responsibility on the project and work for which staff was responsible for
- 7.10 Project Information - Project Duration
- 7.11 Project Information - Completion (Anticipated) Date
- 7.12 Project Information - Size of Project
- 7.13 Project Information - Cost of Project

8 PROJECT DOCUMENTS

- 8.1 PROPOSERS BACKGROUND INFORMATION FORM*
 - a. Please download the attached document, complete all required fields, and upload the completed form here.
 - [Proposers Background Inform...](#)
- *Response required
- 8.2 PROPOSAL SECURITY (BID BOND FORM OR CASHIER'S CHECK)*
 - a. A Proposal Security shall be in the amount of **\$10,000 or 5% of the total cumulative base amount proposed, whichever is less.**
 - b. Therefore, proposal should be accompanied by a certified or cashier's check or by a Bid Bond made payable to the City of Pembroke Pines on an approved form, duly executed by the Proposer as principal and having as surety thereon a surety company acceptable to CITY and authorized to write such Bond under the laws of the State of Florida.
 - c. Contingency is not to be counted in the total amount the proposal security is based on.
 - d. Proposers must submit a scanned copy of their bid security (bid bond form or cashier's check) with their bid submittal through OpenGov.
 - e. Proposers should also submit their original bid security (bid bond form or cashier's check) at time of the bid due date, or they may be deemed as non-responsive.

- f. The original Bid Bond or Cashier's Check should be in a sealed envelope, plainly marked "**BID SECURITY - PSPW-25-10 Academic Village Cooling Tower** and sent to the City of Pembroke Pines, City Clerk's Office, 4th Floor, 601 City Center Way, Pembroke Pines, Florida, 33025.
- g. Please see [SPECIAL TERMS & CONDITIONS](#) of this document for additional information.

*Response required

9 SWORN STATEMENT ON PUBLIC ENTITY CRIMES UNDER FLORIDA STATUTES CHAPTER 287.133(3)(a)

9.1 SWORN STATEMENT ON PUBLIC ENTITY CRIMES FORM*

- a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Sworn Statement on Public E...](#)

*Response required

9.2 Public Entity Crimes Status*

- Which option did you select on the Sworn Statement on Public Entity Crimes Form:
 - A) Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
 - B1) The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)
 - B2) The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing

officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

- B3) The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

☐ A) No convictions.

☐ B1) Convicted, final order did not place on the convicted vendor list.

☐ B2) Convicted, listed, then removed.

☐ B3) Convicted, not listed, action pending.

*Response required

9.3 Did you select option B1 or B2 above?*

☐ Yes

☐ No

*Response required

When equals "Yes"

9.3.1 Please upload a copy of the final order issued by the hearing officer of the State of Florida, Division of Administrative Hearings.*

*Response required

9.4 Did you select option B3 above?*

☐ Yes

☐ No

*Response required

When equals "Yes"

9.4.1 Please describe any action taken by or pending with the Department of General Services.*

*Response required

10 EQUAL BENEFITS CERTIFICATION FOR DOMESTIC PARTNERS AND ALL MARRIED COUPLES

10.1 EQUAL BENEFITS CERTIFICATION FORM*

- a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Equal Benefits Certificatio...](#)

*Response required

10.2 Equal Benefits Status*

- Which option did you select on the Equal Benefits Certification Form:
 - A. Contractor currently complies with the requirements of this section; or
 - B. Contractor will comply with the conditions of this section at the time of contract award; or
 - C. Contractor will not comply with the conditions of this section at the time of contract award: or
 - D. Contractor does not comply with the conditions of this section because of the following allowable exemption (Check only one box below):
 - 1. The Contractor does not provide benefits to employees' spouses in traditional marriages;
 - 2. The Contractor provides an employee the cash equivalent of benefits because the Contractor is unable to provide benefits to employees' Domestic Partners or spouses despite making reasonable efforts to provide them. To meet this exception, the Contractor shall provide a notarized affidavit that it has made reasonable efforts to provide such benefits. The affidavit shall state the efforts taken to provide such benefits and the amount of the cash equivalent. Cash equivalent means the amount of money paid to an employee with a Domestic Partner or spouse rather than providing benefits to the employee's Domestic Partner or spouse. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee's spouse;
 - 3. The Contractor is a religious organization, association, society, or any non-profit charitable or educational institution or organization operated supervised or controlled by or in conjunction with a religious organization, association, or society;
 - 4. The Contractor is a governmental agency;

- ☐ A) Contractor currently complies.
- ☐ B) Will comply by contract award.
- ☐ C) Will not comply.
- ☐ D1) Does not comply due to an exemption: No spousal benefits for anyone.
- ☐ D2) Does not comply due to an exemption: Provides cash equivalent after trying.

☐ D3) Does not comply due to an exemption: Religious or related nonprofit.

☐ D4) Does not comply due to an exemption: Government agency.

*Response required

10.3 Did you select option D2 above?*

☐ Yes

☐ No

*Response required

When equals "Yes"

10.3.1 Please upload a notarized affidavit detailing the reasonable efforts made to provide benefits to employees' Domestic Partners or spouses, along with the amount of the cash equivalent provided.*

*Response required

11 DRUG-FREE WORKPLACE CERTIFICATION

11.1 VENDOR DRUG FREE WORKPLACE CERTIFICATION FORM*

a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Vendor Drug-Free Workplace ...](#)

*Response required

11.2 Drug-Free Status*

☐ Complies fully.

☐ Does not comply.

*Response required

12 STANDARD DOCUMENTS

The following documents are standard documents that the City generally requires for every solicitation. As a result, we recommend vendors to keep these documents updated and readily available so that they can be easily uploaded for each project that the vendor would like to participate in. In the event that the City does not have one of the forms or documents listed below for your company, the City may reach out to your company after the bid has closed to obtain the document(s).

12.1 NON-COLLUSIVE AFFIDAVIT*

a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Non-Collusive Affidavit.pdf](#)

*Response required

12.2 SCRUTINIZED COMPANY CERTIFICATION*

- a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Scrutinized Company Certifi...](#)

*Response required

12.3 E-VERIFY SYSTEM CERTIFICATION*

- a. Please download the attached document, complete all required fields, and upload the completed form here.
- b. Effective January 1, 2021, pursuant to Section 448.095, Florida Statutes, the City may not enter into a contract with a vendor/contractor/subcontractor unless that vendor/contractor/subcontractor is registered with and uses the E-Verify system administered by the U.S. Department of Homeland Security ("DHS").
- c. Contractor shall also require all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of the contract.

- [E-Verify System Certificati...](#)

*Response required

12.4 HUMAN TRAFFICKING AFFIDAVIT*

- a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Human Trafficking Affidavit...](#)

*Response required

13 VENDOR REGISTRATION**13.1 Do you currently have a City of Pembroke Pines Vendor Number registered in the PaymentWorks System?***

- The City of Pembroke Pines utilizes OpenGov as its e-Procurement platform for solicitation and bid submission purposes. However, please be advised that **vendor registration for onboarding and processing payments is handled separately** through the City's Accounts Payable Division using **PaymentWorks**, a secure online vendor management platform.
- All vendors that will be submitting invoices and requiring payments from the City are required to register on the PaymentWorks platform. If the vendor is not currently

registered with the City via PaymentWorks and does not have a Vendor Number, the City will have to invite the vendor to register.

- For formal solicitations such as this project, the Procurement Department will send PaymentWorks registration invitations to vendor(s) who are under active consideration for award. Please be aware that not all vendors who submit proposals will receive an invitation, in order to manage system usage and avoid onboarding vendors who are unlikely to receive payments from the City.
- Invitations will typically be sent to the contact listed on the submitted Vendor Information Form.

☐ Yes

☐ No

*Response required

When equals "Yes"

13.1.1 What is your Vendor Number?*

*Response required

13.2 VENDOR INFORMATION FORM*

- a. Please download the attached document, complete all required fields, and upload the completed form here.

- [Vendor Information Form.pdf](#)

*Response required

13.3 FORM W-9 (REVISED MARCH 2024)*

- a. Please download the attached document, complete all required fields, and upload the completed form here.
- b. Note - Please use the March 2024 version of the form as previously dated versions of this form may delay the processing of any payments to the selected vendor.

- [Form W-9 \(Rev March 2024\).pdf](#)

*Response required

14 OPTIONAL DOCUMENTATION

14.1 TRADE SECRETS

- a. The Proposer's response to this solicitation is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in

connection with this solicitation and the Contract to be executed for this solicitation, subject to the provisions of Chapter 119.07 of the Florida Statutes.

- b. Any language contained in the Proposer's response to the solicitation purporting to require confidentiality of any portion of the Proposer's response to the solicitation, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer's response to the solicitation constitutes a Trade Secret.
- c. EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE SOLICITATION AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE SOLICITATION OR ANY PART THEREOF AS COPYRIGHTED. ALL DOCUMENTS THAT THE FIRM PURPORTS TO BE CONFIDENTIAL, PROPRIETARY OR A TRADE SECRET SHALL BE UPLOADED TO THE OPENGOV WEBSITE AS A SEPARATE ATTACHMENT, IN THIS SECTION, CLEARLY IDENTIFYING THE EXEMPTION BEING CLAIMED UNDER FLORIDA STATUTES 119.07.
- d. The city's determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the city and the city's officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the city's treatment of records as public records.

14.2 FINANCIAL STATEMENTS

- a. The City is **NOT** requesting the vendor to submit any financial statements for this project and prefers if the vendor does not submit financial statements. In addition, if the City needs a copy of the vendor's financial statements, the City can contact the vendor after the bid due date to request those documents. However, if the vendor does submit the financial statements, they should be uploaded in this section.
- b. Any claim of confidentiality on financial statements must be asserted at the time of submittal. The firm must identify the specific statute that authorizes the exemption from the Public Records Law. Please note that the financial statement exemption

provided for in Section 119.071(1)c, Florida Statutes only applies to submittals in response to a solicitation for a “public works” project.

14.3 ALTERNATIVES

- a. If you are submitting an alternative product, please upload any related information in this section (such as specification sheets, etc.).
- b. In addition, pursuant to the “**Brand Names**” Section included in the [GENERAL TERMS AND CONDITIONS](#) Section if and wherever in the specifications a brand name, make, name of manufacturer, trade name, or vendor catalog number is mentioned, it is for the purpose of establishing a grade or quality of material only. Since the City does not wish to rule out other competition and equal brands or makes, the phrase “OR EQUAL” is added. However, if a product other than that specified is bid, Proposers shall indicate on their proposal and clearly state the proposed substitution and deviation. It is the vendor’s responsibility to provide any necessary documentation and samples within their bid submittal to prove that the product is equal to that specified. Such samples are to be furnished before the date of bid opening, unless otherwise specified. Additional evidence in the form of documentation and samples may be requested if the proposed brand is other than that specified. The City retains the right to determine if the proposed brand shall be considered as an approved equivalent or not.

14.4 ADDITIONAL INFORMATION

- a. Please provide any additional information that you deem necessary to complete your proposal in this section, if it has not been requested in another section.

14.5 PROFESSIONAL LICENSES

- a. If applicable, please upload any professional licenses that may be required to perform the services outlined in the solicitation. The following licensing requirements shall apply when the applicable Florida statute mandates specific licensing for Contractors engaged in the type of work covered by this solicitation.
 1. State of Florida, Department of Professional Regulation, Construction Industries Licensing Board and licensed by other federal, state, regional, county or municipal agencies having jurisdiction over the specified construction work.
 2. Said licenses shall be in the Firm's name as it appears on the OpenGov registration and as appropriately registered with the applicable licensing entity. Proposer shall supply appropriate license numbers, with expiration dates, as part of their bid. Failure to hold and provide proof of proper licensing, certification and registration may be grounds for rejection of the bid.

3. Subcontractors contracted by the Prime Contractor shall be licensed in their respective fields to obtain construction permits as necessary. Said licenses must be in the name of the subcontractor.

15 VENDOR CLASSIFICATION

- 15.1 Is your firm a Veteran Owned Small Business (VOSB)?*
- a. The evaluation of competitive bids is subject to section 35.37 of the City's Procurement Procedures which, except where contrary to federal and state law, or any other funding source requirements, provides that preference be given to veteran owned small businesses. To satisfy this requirement, the vendor shall affirm in writing its compliance with the following objective criteria as of the bid or proposal submission date stated in the solicitation.
 - b. A preference of two and a half percent (2.5%) of the total evaluation point, or two and a half percent (2.5%) of the total price, shall be given to the Veteran Owned Small Business (VOSB).

☐ Yes

☐ No

*Response required

When equals "Yes"

15.1.1 Upload the "Determination Letter" from the United States Department of Veteran Affairs Center notifying the business that they have been approved as a Veteran Owned Small Business (VOSB)

When equals "Yes"

15.1.2 Upload Veteran Owned Small Business Certification(s) from any relevant agency(ies)

- 15.2 Is your firm a Minority-Owned Business Enterprise (MBE)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.2.1 Please indicate the classification of your Minority-Owned Business Enterprise (MBE)*

Select all that apply

☐ African-American MBE

☐ Asian-American MBE

☐ Hispanic-American MBE

☐ Native-American MBE

☐ Other option not listed above

*Response required

When equals "Yes"

15.2.2 MBE Certification Documentation*

1. Upload your MBE Certification Documentation here, preferably with the State of Florida's Office of Supplier Diversity. If you have multiple MBE certifications, please combine them into one (1) document and upload.

*Response required

15.3 Is your firm a Woman-Owned Business Enterprise (WBE)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.3.1 WMBE Certification Documentation*

1. Upload your WMBE Certification Documentation here, preferably with the State of Florida's Office of Supplier Diversity. If you have multiple WMBE certifications, please combine them into one (1) document and upload.

*Response required

15.4 Is your firm a HubZone Business / Labor Surplus Area Firm?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.4.1 HubZone Business / Labor Surplus Area Firm Certification Documentation*

1. Upload your HubZone Business / Labor Surplus Area Firm Certification Documentation, preferably with the U.S. Small Business Administration (SBA). If you have multiple certifications, please combine them into one (1) document and upload.

*Response required

15.5 Is your firm a Broward County Small Business Enterprise (SBE)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.5.1 SBE Certification Documentation*

1. Upload your SBE Certification Documentation from Broward County's Office of Economic and Small Business Development (OESBD). If you have multiple certifications, please combine them into one (1) document and upload.

*Response required

15.6 Is your firm a Broward County Business Enterprise (CBE)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.6.1 CBE Certification Documentation*

1. Upload your CBE Certification Documentation from Broward County's Office of Economic and Small Business Development (OESBD). If you have multiple certifications, please combine them into one (1) document and upload.

*Response required

15.7 Is your firm a Broward County Disadvantaged Business Enterprise (DBE)?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.7.1 DBE Certification Documentation*

1. Upload your DBE Certification Documentation from Broward County's Office of Economic and Small Business Development (OESBD). If you have multiple certifications, please combine them into one (1) document and upload.

*Response required

15.8 Does your firm have a Vendor Classification that was not listed above?*

☐ Yes

☐ No

*Response required

When equals "Yes"

15.8.1 Other Vendor Classification Certification Documentation*

1. Upload your other Certification Documentation here. If you have multiple certifications, please combine them into one (1) document and upload.

*Response required

16 FEDERAL DOCUMENTS

16.1 Certification Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters for Expenditure of Federal Funds*

a. Lobbying:

1. As required by 7 CFR Part 3018, for persons entering into a contract, grant or cooperative agreement over **\$100,000** involving the expenditure of Federal funds, the Contractor must complete the **Certification Regarding Lobbying**.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress, in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall also complete and submit the **Standard Form - LLL, "Disclosure Form to Report Lobbying,"** in accordance with its instructions.

b. Debarment, Suspension and Other Responsibility Matters:

1. Where the Contractor is unable to certify to any of the statements in the certification for **Debarment, Suspension and Other Responsibility Matters**, he or she shall **provide an explanation**.

- Please download the below documents, complete, and upload.

- [Federal Certification for L...](#)

*Response required

16.2 Are you currently registered as an active entity on SAM.gov (System for Award Management)?*

- a. All vendors submitting bids for this project must be registered and active in the System for Award Management (SAM.gov) at the time of bid award. This is a federal requirement for entities receiving federal funds, including contracts, grants, or other financial assistance. Registration on SAM.gov ensures that vendors are eligible to do business with the U.S. government and are not suspended, debarred, or otherwise excluded from participation in federal programs. SAM registration is free and can be completed at <https://sam.gov>. Bidders must provide their Unique Entity ID (UEI) and proof of active registration as part of their proposal.

☐ Yes

☐ No

*Response required

When equals "Yes"

16.2.1 If yes, please provide your Unique Entity ID (UEI)*

*Response required

When equals "Yes"

16.2.2 What is the expiration date of your current SAM.gov registration?
(MM/DD/YYYY)*

*Response required

When equals "Yes"

16.2.3 Proof of Registration Upload*

1. Please upload a PDF copy or screenshot of your entity's active registration status from SAM.gov that includes:
 - A. Entity Name
 - B. Unique Entity ID (UEI)
 - C. DUNS (if applicable)
 - D. Registration Status ("Active")
 - E. Expiration Date
2. *This document must be downloaded from <https://sam.gov> and must show the current status at the time of bid submission.*

*Response required

16.3 Debarment Status - Is your entity currently debarred, suspended, or otherwise excluded from receiving federal contracts or financial assistance?*

☐ Yes

☐ No

*Response required

When equals "Yes"

16.3.1 If yes, please provide an explanation.*

*Response required

When equals "Yes"



16.3.2 If yes, please upload any relevant documentation, if applicable.

16.4 I certify that the information provided above is true and correct to the best of my knowledge. I understand that false or misleading statements may disqualify this bid and subject the entity to federal penalties.*

☐ Please confirm

*Response required

SECTION 7 - EVALUATION OF PROPOSALS & PROCESS SELECTION

7.1 Qualifying & Selecting Firms

- A. Staff will evaluate all responsive proposals received from proposers who meet or exceed the bid requirements contained in the solicitation. Evaluations shall be based upon the information and references contained in the proposals as submitted.
- B. Staff will make a recommendation to the City Commission for award of contract.
- C. The contract shall be awarded to the most responsive/responsible bidder whose bid is determined to be the most advantageous to the City taking into consideration the evaluation criteria.

SECTION 8 - INSURANCE REQUIREMENTS

8.1 Indemnification for Design Professionals and Construction Contracts

The Contractor shall indemnify and hold harmless the CITY, its officers and employees from any and all liability, losses or damages, including reasonable attorneys' fees and costs of defense, which the CITY, its officers and employees, may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature to the extent such claims are caused by negligence, recklessness, or intentional wrongful conduct of the Contractor and other persons employed or utilized by Contractor during performance of this Agreement. The Contractor shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the CITY, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorneys' fees which may issue thereon. The Contractor expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the CITY or its officers, employees, agents and instrumentalities as herein provided.

8.2 Insurance Coverage

- A. Contractor shall not commence work under this Agreement until it has obtained all insurance required under this paragraph and such insurance has been approved by the Risk Manager of the CITY nor shall the Contractor allow any subcontractor to commence work on any subcontract until all similar such insurance required of the subcontractor has been obtained and similarly approved.
- B. Certificates of Insurance, reflecting evidence of the required insurance, shall be filed with the CITY's Risk Manager prior to the commencement of this Agreement. Policies shall be issued by companies authorized to do business under the laws of the State of Florida. The insurance company shall be rated no less than "A" as to management, and no less than "Class VI" as to financial strength according to the latest edition of Best's Insurance Guide published by A.M. Best Company.
- C. Certificates of Insurance shall provide for thirty (30) days' prior written notice to the CITY in case of cancellation or material changes in the policy limits or coverage states. If the carrier cannot provide thirty (30) days' notice of cancellation, either the Contractor or their Insurance Broker must agree to provide notice.
- D. Insurance shall be in force until all obligations required to be fulfilled under the terms of the Agreement are satisfactorily completed as evidenced by the formal acceptance by the CITY. In the event the insurance certificate provided indicates that the insurance shall terminate and lapse during the period of this Agreement, the Contractor shall furnish, at least forty-five (45) days prior to the expiration of the date of such insurance, a renewed certificate of insurance as proof that equal and like coverage for the balance of the period of the

Agreement and extension thereunder is in effect. The Contractor shall neither commence nor continue to provide any services pursuant to this Agreement unless all required insurance remains in full force and effect. Contractor shall be liable to CITY for any lapses in service resulting from a gap in insurance coverage.

- E. Contractor shall be required to obtain all applicable insurance coverage, as indicated in the sections below, prior to commencing any work pursuant to this Agreement.

8.3 Comprehensive General Liability Insurance

Comprehensive General Liability Insurance written on an occurrence basis including, but not limited to: coverage for bodily injury and property damage, personal & advertising injury, products & completed operations, and contractual liability. Coverage must be written on an occurrence basis, with limits of liability no less than:

- A. Each Occurrence Limit - \$1,000,000
- B. Fire Damage Limit (Damage to rented premises) - \$100,000
- C. Personal & Advertising Injury Limit - \$1,000,000
- D. General Aggregate Limit - \$2,000,000
- E. Products & Completed Operations Aggregate Limit - \$2,000,000

Products & Completed Operations Coverage shall be maintained for the later of three (3) years after the delivery of goods/services or final payment under the Agreement. *(For Construction projects: Increase to ten (10) years and include a Designated Construction Project(s) General Aggregate Limit)*

The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.

8.4 Workers' Compensation and Employers' Liability Insurance

Workers' Compensation and Employers' Liability Insurance covering all employees, and/or volunteers of the Contractor engaged in the performance of the scope of work associated with this Agreement. In the case any work is sublet, the Contractor shall require the subcontractors similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Contractor. Coverage for the Contractor and all subcontractors shall be in accordance with applicable state and/or federal laws that may apply to Workers' Compensation Insurance with limits of liability no less than:

- A. Workers' Compensation: Coverage A – Statutory
- B. Employers Liability: Coverage B

\$500,000 Each Accident

\$500,000 Disease – Policy Limit

\$500,000 Disease – Each Employee

If Contractor claims to be exempt from this requirement, Contractor shall provide CITY proof of such exemption along with a written request for CITY to exempt Contractor, written on Contractor letterhead.

8.5 Comprehensive Auto Liability Insurance

Comprehensive Auto Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the performance of work under this Agreement, with a combined single limit of liability for bodily injury and property damage no less than:

- A. Any Auto (Symbol 1)
Combined Single Limit (Each Accident) - \$1,000,000
- B. Hired Autos (Symbol 8)
Combined Single Limit (Each Accident) - \$1,000,000
- C. Non-Owned Autos (Symbol 9)
Combined Single Limit (Each Accident) - \$1,000,000

If work under this Agreement includes transportation of hazardous materials, policy shall include pollution liability coverage equivalent to that provided by the latest version of the ISO pollution liability broadened endorsement for auto and the latest version of the ISO Motor Carrier Act endorsement, equivalents or broader language.

If Contractor requests reduced limits under a Personal Auto Liability Policy and it is agreed to by the CITY, coverage shall include Bodily Injury limits of \$100,000 per person/\$300,000 per occurrence and Property Damage limits of \$300,000 per occurrence.

8.6 Umbrella/Excess Liability Insurance

Umbrella/Excess Liability Insurance in the amount of **\$2,000,000** as determined appropriate by the CITY depending on the type of job and exposures contemplated. Coverage must be follow form of the General Liability, Auto Liability and Employer's Liability. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment pursuant to this Agreement.

The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.

8.7 Environmental/Pollution Liability Insurance

Environmental/Pollution Liability insurance shall be required with a limit of no less than \$1,000,000 per wrongful act. Coverage shall include: Contractor's completed operations, sudden, accidental and

gradual pollution conditions. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment pursuant to this Agreement. Retroactive date, if any, to be no later than the first day of service to the CITY. *(Limit to align with size and scope of the Agreement and exposure inherent with operation/services being performed. For Construction projects: Increase to ten (10) years)*

The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.

8.8 Builder's Risk Insurance

Builder's Risk Insurance shall be "All Risk" for one hundred percent (100%) of the completed value of the project that is the subject of this Agreement with a deductible of not more than five percent (5%) for Named Windstorm and \$20,000 per claim for all other perils. The Builder's Risk Insurance shall include interests of the CITY, the Contractor and subcontractors of the project. The Contractor shall include a separate line item for all costs associated with the Builder's Risk Insurance Coverage for the project. The CITY reserves the right at its sole discretion to utilize the Contractor's Builder's Risk Insurance or for the CITY to purchase its own Builder's Risk Insurance for the Project. Prior to the Contractor purchasing the Builder's Risk insurance for the project, the Contractor shall allow the CITY the opportunity to analyze the Contractor's coverage and determine who shall purchase the coverage. Should the CITY utilize the Contractor's Builder's Risk Insurance, the Contractor shall be responsible for all deductibles. If the CITY chooses to purchase the Builder's Risk Coverage on the project, the Contractor shall provide the CITY with a change order deduct for all premiums and costs associated with the Builder's Risk insurance in their schedule. Should the CITY choose to utilize the CITY's Builder's Risk Program, the CITY shall be responsible for the Named Windstorm Deductible and the Contractor shall be responsible for the All Other Perils Deductible.

If and when 100% is not available or reasonable, the CITY Risk Manager is to make the determination as to what limits are appropriate for the given project.

8.9 Required Endorsements

- A. The City of Pembroke Pines shall be named as an Additional Insured on each of the Liability Policies required herein.
- B. Waiver of all Rights of Subrogation against the CITY.
- C. Thirty (30) Day Notice of Cancellation or Non-Renewal to the CITY. Contractor
- D. 's policies shall be Primary & Non-Contributory.
- E. All policies shall contain a "severability of interest" or "cross liability" clause without obligation for premium payment of the CITY.
- F. The City of Pembroke Pines shall be named as a Loss Payee on all Property and/or Inland Marine Policies as their interest may appear.

8.10 Additional Requirements

- A. Any and all insurance required of the Contractor pursuant to this Agreement must also be required by any subcontractor in the same limits and with all requirements as provided herein, including naming the CITY as an additional insured, in any work that is subcontracted unless such subcontractor is covered by the protection afforded by the Contractor and provided proof of such coverage is provided to CITY. The Contractor and any subcontractors shall maintain such policies during the term of this Agreement.
- B. The CITY reserves the right to require any other additional types of insurance coverage and/or higher limits of liability it deems necessary based on the nature of work being performed under this Agreement.
- C. The insurance requirements specified in this Agreement are minimum requirements and in no way reduce any liability the Contractor has assumed in the indemnification/hold harmless section(s) of this Agreement.

SECTION 9 - GENERAL TERMS AND CONDITIONS

9.1 EXAMINATION OF CONTRACT DOCUMENTS

Before submitting a Proposal, each Proposer should:

- A. consider federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost or performance of the work,
- B. study and carefully correlate the Proposer's observations with the Proposal Documents; and
- C. notify the Purchasing Manager of all conflicts, errors and discrepancies, if any, in the Proposal Documents.

The Proposer, by and through the submission of a Proposal, agrees that Proposer shall be held responsible for having familiarized themselves with the nature and extent of the work and any local conditions that may affect the work to be done and the services, equipment, materials, parts and labor required.

9.2 CONFLICT OF INSTRUCTIONS

If a conflict exists between the General Conditions and Instructions stated herein and specific conditions and instructions contained in specifications, the specifications shall govern.

9.3 ADDENDA or ADDENDUM

A formal solicitation may require an Addendum to be issued. An addendum in some way may clarify, correct or change the original solicitation (i.e. due date/time, specifications, terms, conditions, line item).

Bidders must register for an account on the City's e-Procurement Portal, hosted by OpenGov. Once the bidder has completed registration, they will receive addenda notifications via email by clicking "Follow" on this project. Ultimately, it is the sole responsibility of each bidder to periodically check the site for any addenda at <https://procurement.opengov.com/portal/pembrokepines>.

Contractors are cautioned not to consider verbal modifications to the solicitation, as the addendum issued through OpenGov will be the only official method whereby changes will be made.

9.4 INTERPRETATIONS AND QUESTIONS

If the Proposer is in doubt as to the meaning of any of the Proposal Documents, is of the opinion that the Conditions and Specifications contain errors or contradictions or reflect omissions, or has any question concerning the conditions and specifications, the Proposer shall submit a question for interpretation or clarification.

The City requires all questions relating to the solicitation to be submitted through the "Question & Answer" tab, for the specific project, on the City's e-Procurement Portal, located at <https://procurement.opengov.com/portal/pembrokepines>. Questions and inquiries must be received by the "Question Due Date" stated in the solicitation. Questions received after the "Question Due

Date” shall not be answered. Interpretations or clarifications in response to such questions will be issued via OpenGov. Bidders may also click “Follow” on this solicitation to receive an e-mail notification(s) when answers are posted. It is the responsibility of the bidder to check the website for answers to inquiries. The issuance of a response via OpenGov is considered an Addendum and shall be the only official method whereby such an interpretation or clarification will be made.

OpenGov Support is also available to assist proposers with submitting their proposal and to ensure that proposers are submitting their proposals correctly. Proposers should ensure that they contact OpenGov support, with ample time before the bid closing date and time, via one of the following methods:

- A. Chat (preferred method): Click the button in the lower right-hand corner of the portal when logged in.
- B. E-mail: support@opengov.com
- C. Phone: 1 (605) 336-7167
- D. <https://opengov.my.site.com/support/s/contactsupport>

For all other questions related to this solicitation, please contact the Procurement Department at purchasing@ppines.com.

9.5 RULES, REGULATIONS, LAWS, ORDINANCES and LICENSES

The awarded Contractor shall observe and obey all laws, ordinances, rules, and regulations of the federal, state, and CITY, which may be applicable to the service being provided. The awarded firm shall have or be responsible for obtaining all necessary permits or licenses required, if necessary, in order to provide this service.

Proposer warrants by submittal that prices quoted here are in conformity with the latest federal price guidelines, if any.

9.6 WARRANTIES FOR USAGE

Whenever a bid is sought, seeking a source of supply for a specified time for materials or service, the quantities or usage shown are estimated only. No guarantee or warranty is given or implied by the City as to the total amount that may or may not be purchased from any resulting contracts. These quantities are for proposer’s information only and will be used for tabulation and presentation of bid.

9.7 BRAND NAMES

If and wherever in the specifications a brand name, make, name of manufacturer, trade name, or vendor catalog number is mentioned, it is for the purpose of establishing a grade or quality of material only. Since the City does not wish to rule out other competition and equal brands or makes, the phrase “OR EQUAL” is added. However, if a product other than that specified is bid, Proposers shall indicate on their proposal and clearly state the proposed substitution and deviation. It is the **Contractor’s responsibility** to provide any necessary documentation and samples within their bid submittal to prove that the product is equal to that specified. Such samples are to be furnished before the date of bid opening, unless otherwise specified. Additional evidence in the form of

documentation and samples may be requested if the proposed brand is other than that specified. The City retains the right to determine if the proposed brand shall be considered as an approved equivalent or not.

9.8 QUALITY

All materials used for the manufacture or construction of any supplies, materials, or equipment covered by this bid shall be new, the latest model, of the best quality, and highest grade workmanship, unless otherwise noted.

9.9 SAMPLES

Samples, when requested, must be furnished before, or at the bid opening, unless otherwise specified, and delivered free of expense to the City and if not used in testing or destroyed, will upon request within thirty (30) days of bid award be returned at the proposer's expense.

9.10 ESTIMATED QUANTITIES

No guarantee is expressed or implied as to the total quantity of commodities/services to be purchased pursuant to this solicitation. Estimated quantities will be used for comparison and ranking purposes only. The City is not obligated to contract for a given amount of commodities/services subsequent to the award of this solicitation. The City reserves the right to issue separate purchase orders as needed, issue a blanket purchase order, and release partial quantities, or any combination of the preceding as deemed necessary by the City.

9.11 DEVELOPMENT COSTS

Neither the City nor its representatives shall be liable for any expenses incurred in connection with the preparation, submission or presentation of a Bid in response to this solicitation. All information in the Bid shall be provided at no cost to the City.

9.12 PRICING

Prices should be stated in units of quantity specified in the bidding specifications. In case of discrepancy in computing the amount of the bid, the unit prices quoted will govern.

Proposer warrants by virtue of bidding that prices, terms, and conditions quoted in his bid will be firm for acceptance for a period of ninety (90) days from date of bid opening unless otherwise stated by the City or proposer.

9.13 DELIVERY POINT

All items shall be delivered F.O.B. destination, and delivery cost and charges included in the bid price. Failure to do so may be cause for rejection of bid.

9.14 TAX EXEMPT STATUS

The City is exempt from Florida Sales and Federal Excise taxes on direct purchase of tangible property.

9.15 CONTRACT TIME

By virtue of the submission of the Proposal, Proposer agrees and fully understands that the completion time of the work of the Contract is an essential and material condition of the Contract and that time is of the essence. The Successful Proposer agrees that all work shall be prosecuted regularly, diligently and uninterrupted at such rate of progress as will ensure full completion thereof within the time specified. Failure to complete the work within the time period specified shall be considered a default.

In addition, time will be of the essence for any orders placed as a result of this bid. Purchaser reserves the right to cancel such orders, or part thereof, without obligation if delivery is not made at the time(s) or place(s) specified.

9.16 COPYRIGHT OR PATENT RIGHTS

Proposer warrants that there have been no violations of copyrights or patent rights in manufacturing, producing, or selling other goods shipped or ordered as a result of this bid, and seller agrees to hold the purchaser harmless from any and all liability, loss or expense occasioned by such violation.

9.17 ANTI-TRUST VIOLATIONS

Pursuant to Section 287.137, Florida Statutes, as may be amended, a person or an affiliate who has been placed on the antitrust violator vendor list following a conviction or being held civilly liable for an antitrust violation may not submit a bid, proposal, or reply for any new contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply for a new contract with a public entity for the construction or repair of a public building or public work; may not submit a bid, proposal, or reply on new leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a new contract with a public entity; and may not transact new business with a public entity.

9.18 PUBLIC ENTITY CRIMES

Pursuant to Sec. 287.133(2)(a), Fla. Stat., a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime or who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

Pursuant to Sec. 287.134(2)(b), Fla. Stat., a public entity may not accept any bid, proposals, or replies from, award any contract to, or transact any business with any entity or affiliate on the discriminatory vendor list for a period of 36 months following the date that entity or affiliate was placed on the discriminatory vendor list unless that entity or affiliate has been removed from the list. A public entity that was transacting business with an entity at the time of the discrimination resulting in that entity being placed on the discriminatory vendor list may not accept any bid, proposal, or reply from, award any contract to, or transact any business with any other entity who is under the

same, or substantially the same, control as the entity whose name appears on the discriminatory vendor list so long as that entity's name appears on the discriminatory vendor list.

The Sworn Statement of Public Entity Crime Affidavit Form, in the Submittal Documents section on the OpenGov portal for this solicitation, includes documentation that shall be executed by an individual authorized to bind the Proposer. The Proposer further understands and accepts that any contract issued as a result of this solicitation shall be either voidable or subject to immediate termination by the City. In the event there is any misrepresentation or lack of compliance with the mandates of Section 287.133 or Section 287.134, respectively, Florida Statutes. The City in the event in such termination, shall not incur any liability to the Proposer for any goods, services or materials furnished.

9.19 CONFLICT OF INTEREST

The award of any contract hereunder is subject to the provisions of Chapter 112, Florida Statutes. Proposers must disclose with their Proposal the name of any officer, director, partner, proprietor, associate or agent who is also an officer or employee of CITY or any of its agencies. Further, all Proposers must disclose the name of any officer or employee of CITY who owns, directly or indirectly, an interest of five percent (5%) or more in the Proposer's firm or any of its branches or affiliate companies.

9.20 FACILITIES

The City reserves the right to inspect the Proposer's facilities at any time with prior notice.

9.21 ENVIRONMENTAL REGULATIONS

CITY reserves the right to consider Proposer's history of citations and/or violations of environmental regulations in determining a Proposer's responsibility, and further reserves the right to declare a Proposer not responsible if the history of violations warrant such determination. Proposer shall submit with the Proposal, a complete history of all citations and/or violations, notices and dispositions thereof. The non-submission of any such documentation shall be deemed to be an affirmation by the Proposer that there are no citations or violations. Proposer shall notify CITY immediately of notice of any citation or violation that Proposer may receive after the Proposal opening date and during the time of performance of any contract awarded to Proposers.

9.22 SIGNATURE REQUIRED

All proposals must be signed with the firm name and by an officer or employee having authority to bind the company or firm by his signature. FAILURE TO PROPERLY SIGN PROPOSAL SHALL INVALIDATE SAME, AND IT MAY NOT BE CONSIDERED FOR AWARD.

The individual executing this Bid on behalf of the Company warrant to the City that the Company is authorized to do business in the State of Florida, is in good standing and that Company possesses all of the required licenses and certificates of competency required by the State of Florida and Broward County to provide the goods or perform the services herein described.

The signed bid shall be considered an offer on the part of the proposer or Contractor, which offer shall be deemed accepted upon approval by the City Commission of the City of Pembroke Pines and in case of default on the part of the proposer or Contractor after such acceptance, the City of Pembroke Pines may take such action as it deems appropriate including legal action for damages or specific performance.

9.23 MANUFACTURER'S CERTIFICATION

The City of Pembroke Pines reserves the right to request from proposer separate manufacturer certification of all statements made in the proposal.

9.24 MODIFICATION OR WITHDRAWAL OF PROPOSAL

The City recommends for proposers to submit their proposals as soon as they are ready to do so. Please allow ample time to submit your proposals on the OpenGov website. Proposals may be modified or withdrawn prior to the deadline for submitting Proposals.

9.25 PUBLIC BID; BID OPENING AND GENERAL EXEMPTIONS

All submittals received by the deadline will be recorded, and will subsequently be publicly opened on the same business day at 2:30 pm at the office of the City Clerk, 4th Floor, 601 City Center Way, Pembroke Pines, Florida, 33025.

All Proposals received from Proposers in response to the solicitation will become the property of CITY and will not be returned to the Proposers. In the event of Contract award, all documentation produced as part of the Contract shall become the exclusive property of CITY. Proposers are requested to identify specifically any information contained in their Proposals which they consider confidential and/or proprietary and which they believe to be exempt from disclosure, citing specifically the applicable exempting law.

Pursuant to Section 119.071 of the Florida Statutes, sealed bids, proposals, or replies received by a Florida public agency shall remain exempt from disclosure until an intended decision is announced or until 30 days from the opening, whichever is earlier.

Therefore, proposers will not be able to procure a copy of their competitor's bids until an intended decision is reached or 30 days has elapsed since the time of the bid opening.

However, pursuant to Section 255.0518 of the Florida Statutes, when opening sealed bids that are received pursuant to a competitive solicitation for **construction or repairs on a public building or public work**, the entity shall:

- A. Open the sealed bids at a public meeting.
- B. Announce at that meeting the name of each bidder and the price submitted in the bid.
- C. Make available upon request the name of each bidder and the price submitted in the bid.

For solicitations that are **not** for “**construction or repairs on a public building or public work**” the City shall not reveal the prices submitted in the bids until an intended decision is announced or until 30 days from the opening, whichever is earlier.

9.26 RESERVATIONS FOR REJECTION AND AWARD

The City of Pembroke Pines reserves the right to accept or reject any and all bids or parts of bids, to waive irregularities and technicalities, and to request rebids. The City also reserves the right to award a contract on such items(s) or service(s) the City deems will best serve its interests. All bids shall be awarded to the most responsive/responsible proposer, provided the (City) may for good cause reject any bid or part thereof. It further reserves the right to award a contract on a split order basis, or such combinations as shall best serve the interests of the City unless otherwise specified. No premiums, rebates or gratuities permitted, either with, prior to, or after award. This practice shall result in the cancellation of said award and/or return of items (as applicable) and the recommended removal of proposer from bid list(s).

9.27 BID PROTEST

Any protests or challenges to this competitive procurement shall be governed by Section 35.38 of the City’s Code of Ordinances.

9.28 INDEMNIFICATION

The Successful Proposer shall pay all claims, losses, liens, settlements or judgments of any nature whatsoever in connection with the subsequent indemnifications including, but not limited to, reasonable attorney's fees (including appellate attorney's fees) and costs.

CITY reserves the right to select its own legal counsel to conduct any defense in any such proceeding and all costs and fees associated therewith shall be the responsibility of Successful Proposer under the indemnification agreement. Nothing contained herein is intended nor shall it be construed to waive City’s rights and immunities under the common law or Florida Statute 768.28 as amended from time to time.

Additional indemnification requirements may be included under Special Terms and Conditions and/or as part of a specimen contract included in the solicitation package.

General Indemnification: To the fullest extent permitted by laws and regulations, Successful Proposer shall indemnify, defend, save and hold harmless the CITY, its officers, agents and employees, harmless from any and all claims, damages, losses, liabilities and expenses, direct, indirect or consequential arising out of or in consequential arising out of or alleged to have arisen out of or in consequence of the products, goods or services furnished by or operations of the Successful Proposer or his subcontractors, agents, officers, employees or independent contractors pursuant to or in the performance of the Contract.

Indemnification for Design Professionals and Construction Contracts: The Successful Proposer shall indemnify and hold harmless the CITY, its officers and employees, from any and all liability, losses or damages, including reasonable attorneys' fees and costs of defense, which the CITY, its

officers and employees, may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature to the extent such claims are caused by the negligence, recklessness, or intentional wrongful conduct of the Successful Proposer and other persons employed or utilized by the Successful Proposer during performance of the resulting Agreement.

Patent and Copyright Indemnification: Successful Proposer agrees to indemnify, defend, save and hold harmless the CITY, its officers, agents and employees, from all claims, damages, losses, liabilities and expenses arising out of any alleged infringement of copyrights, patent rights and/or the unauthorized or unlicensed use of any invention, process, material, property or other work manufactured or used in connection with the performance of the Contract, including its use by CITY.

9.29 DEFAULT PROVISION

In the case of default by the proposer or Contractor, the City of Pembroke Pines may procure the articles or services from any other sources and hold the proposer or Contractor responsible for any excess costs occasioned or incurred thereby.

The City shall be the sole judge of nonperformance, which shall include any failure on the part of the successful Proposer to accept the Award, to furnish required documents, and/or to fulfill any portion of the contract within the time stipulated. Upon default by the successful Proposer to meet any terms of this agreement, the City will notify the Proposer five (5) days (weekends and holidays excluded) to remedy the default. Failure on the Contractor's part to correct the default within the required five (5) days shall result in the contract being terminated and upon the City notifying in writing the Contractor of its intentions and the effective date of the termination. The following shall constitute default:

- A. Failure to perform the Work required under the contract and/or within the time required or failing to use the subcontractor, entities and personnel as identified and set forth, and to the degree specified in the contract.
- B. Failure to begin the Work under this Bid within the time specified.
- C. Failure to perform the Work with sufficient Workers and equipment or with sufficient materials to ensure timely completion.
- D. Neglecting or refusing to remove materials or perform new Work where prior Work has been rejected as non-conforming with the terms of the contract.
- E. Becoming insolvent, being declared bankrupt, or committing act of bankruptcy or insolvency, or making an assignment renders the successful Proposer incapable of performing the Work in accordance with and as required by the contract.
- F. Failure to comply with any of the terms of the contract in any material respect.

In the event of default of a contract, the successful Proposer shall pay all attorney's fees and court costs incurred in collecting any damages. The successful Proposer shall pay the City for any and all costs incurred in ensuing the completion of the project.

Additional provisions may be included in the specimen contract.

9.30 ACCEPTANCE OF MATERIAL

The material delivered under this proposal shall remain the property of the seller until a physical inspection and actual usage of this material and/or services is made and thereafter accepted to the satisfaction of the City and must comply with the terms herein, and be fully in accord with specifications and of the highest quality. In the event the material and/or services supplied to the City are found to be defective or do not conform to specifications, the City reserves the right to cancel the order upon written notice to the seller and return product to seller at the sellers expense.

9.31 LOCAL GOVERNMENT PROMPT PAYMENT ACT

The City complies with Florida Statute 218.70, Local Government Prompt Payment Act.

9.32 SCRUTINIZED COMPANIES LIST

In accordance with Section 287.135, Florida Statutes, as amended, a company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local governmental entity for goods or services of:

- A. Any amount if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel; or
- B. One million dollars or more if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company:
 - 1. Is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Terrorism Sectors List, created pursuant to Section 215.473, Florida Statutes; or
 - 2. Is engaged in business operations in Syria.

By submitting a bid, proposal or response, the company, its principals or owners, certify that they are not listed on the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List, Scrutinized Companies with Activities in the Iran Terrorism Sectors List, or is engaged in business operations in Syria.

9.33 PUBLIC RECORDS; TRADE SECRET, PROPRIETARY AND CONFIDENTIAL SUBMITTALS

The Proposer's response to this solicitation is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes

Chapter 119.07 (“Public Records Law”). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this solicitation and the Contract to be executed for this solicitation, subject to the provisions of Chapter 119.07 of the Florida Statutes.

Any language contained in the Proposer’s response to the solicitation purporting to require confidentiality of any portion of the Proposer’s response to the solicitation, except to the extent that certain information is in the City’s opinion a Trade Secret pursuant to Florida law, shall be void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 (“Public Records Laws”), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer’s response to the solicitation constitutes a Trade Secret.

Any claim of confidentiality on financial statements must be asserted at the time of submittal. The firm must identify the specific statute that authorizes the exemption from the Public Records Law. Please note that the financial statement exemption provided for in Section 119.071(1)c, Florida Statutes only applies to submittals in response to a solicitation for a “public works” project.

EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE SOLICITATION AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE SOLICITATION OR ANY PART THEREOF AS COPYRIGHTED. ALL DOCUMENTS THAT THE FIRM PURPORTS TO BE CONFIDENTIAL, PROPRIETARY OR A TRADE SECRET SHALL BE UPLOADED TO THE OPENGOV WEBSITE AS A SEPARATE ATTACHMENT CLEARLY IDENTIFYING THE EXEMPTION BEING CLAIMED UNDER FLORIDA STATUTES 119.07.

The city’s determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the city and the city’s officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the city’s treatment of records as public records.

9.34 PURCHASING AGREEMENTS WITH OTHER GOVERNMENT AGENCIES

It is hereby made part of this solicitation that the submission of any bid response to this advertised request constitutes a bid made under the same or similar terms and conditions, for the same price, or better price, to other government agencies if agreeable by the proposer and the government agency.

At the option of the Contractor, the use of the contract resulting from this solicitation may be extended to other governmental agencies, including the State of Florida, its agencies, political subdivisions, counties, and cities.

Each governmental agency allowed by the Contractor to use this contract shall do so independently of any other governmental entity. Each agency shall be responsible for its own purchases and shall

be liable only for goods or services ordered, received, and accepted. No agency receives any liability by virtue of this bid and subsequent contract award.

9.35 CONE OF SILENCE

Prohibited Communication: In accordance with the Cone of Silence Ordinance, Section 35.40 of the City's Code of Ordinances, during the course of a sealed competitive solicitation, a cone of silence shall be in effect between:

- A. Any person or entity that seeks a contract, contract amendment, award, recommendation, or approval related to a sealed competitive solicitation or that is subject to being evaluated or having its response evaluated in connection with a sealed competitive solicitation, including a person or entity's representative; and
- B. The City Manager or any person or group of persons appointed or designated by the City Commission or the City Manager to evaluate, select, or make a recommendation to the City Commission or the City Manager regarding a sealed competitive solicitation, including any member of the selection/evaluation committee.

Effective Dates: A cone of silence shall be in effect during a sealed competitive solicitation process beginning upon the advertisement for the sealed competitive solicitation or during such other procurement activities as declared by the City Commission, and shall terminate at the time the City Commission takes final action or gives final approval of a contract, rejects all bids or responses to the sealed competitive solicitation, or takes other action which ends the sealed competitive solicitation process.

Permitted Communication: The cone of silence shall not apply to:

- A. Written or oral communications with legal counsel for the city, the Procurement Department staff for the city, and the person or persons designated in the sealed competitive solicitation as the contact person for clarification or information related to the sealed competitive solicitation.
- B. Public presentations, asking questions, or providing feedback at pre-bid meetings, site visits or conferences or at a selection, evaluation or negotiation meeting related to the sealed competitive solicitation.
- C. Contract negotiations with the selected entity.

Violations: Any action in violation of this section shall be cause for disqualification of the bid or the proposal.

9.36 E-VERIFY

Contractor certifies that it is aware of and complies with the requirements of Section 448.095, Florida Statutes, as may be amended from time to time and briefly described herein below.

- A. Definitions for this Section:

1. “Contractor” means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration. “Contractor” includes, but is not limited to, a vendor or consultant.
2. “Subcontractor” means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.
3. “E-Verify system” means an Internet-based system operated by the United States Department of Homeland Security that allows participating employers to electronically verify the employment eligibility of newly hired employees.

B. Registration Requirement; Termination:

Pursuant to Section 448.095, Florida Statutes, effective January 1, 2021, Contractors, shall register with and use the E-verify system in order to verify the work authorization status of all newly hired employees. Contractor shall register for and utilize the U.S. Department of Homeland Security’s E-Verify System to verify the employment eligibility of:

1. All persons employed by a Contractor to perform employment duties within Florida during the term of the contract; and
2. All persons (including subvendors / subconsultants / subcontractors) assigned by Contractor to perform work pursuant to the contract with the City of Pembroke Pines. The Contractor acknowledges and agrees that registration and use of the U.S. Department of Homeland Security’s E-Verify System during the term of the contract is a condition of the contract with the City of Pembroke Pines; and
3. The Contractor shall comply with the provisions of Section 448.095, Fla. Stat., “Employment Eligibility,” as amended from time to time. This includes, but is not limited to registration and utilization of the E-Verify System to verify the work authorization status of all newly hired employees. Contractor shall also require all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than twenty (20) calendar days after the date of termination. Termination of this Contract under this Section is not a breach of contract and may not be considered as such. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of one (1) year after the date of termination.

9.37 JESSICA LUNSFORD ACT

Background screening requirements for Contractor's performing services for or at City's Charter Schools.

- A. Except as provided in §§1012.467 or 1012.468, Florida Statutes, non-instructional school employees or contractual personnel who:
 - 1. are permitted access on school grounds when students are present,
 - 2. have direct contact with students or,
 - 3. have access to or control of school funds must meet level 2 screening requirements as described in §1012.32, Florida Statutes. Contractual personnel shall include any Contractor, individual, or entity under contract with the City engaged to perform services for or at City's Charter Schools.
- B. Every 5 years following employment or entry into a resulting contract in a capacity described in subsection (A), each person who is so employed or under contract with the City must meet level 2 screening requirements as described in §1012.32, Florida Statutes, at which time the City shall request the Department of Law Enforcement to forward the fingerprints to the Federal Bureau of Investigation for the level 2 screening. If, for any reason following employment or entry into a resulting contract in a capacity described in subsection (A), the fingerprints of a person who is so employed or under contract with the City are not retained by the Department of Law Enforcement under §1012.32(3)(a) and (b), Florida Statutes, the person must file a complete set of fingerprints with the City. Upon submission of fingerprints for this purpose, the City shall request the Department of Law Enforcement to forward the fingerprints to the Federal Bureau of Investigation for the level 2 screening, and the fingerprints shall be retained by the Department of Law Enforcement under §1012.32(3)(a) and (b), Florida Statutes. The cost of the state and federal criminal history check required by level 2 screening shall be borne by the Contractor, or the person fingerprinted. Under penalty of perjury, each person who is employed or engaged to perform a resulting contract in a capacity described in subsection (A) must agree to inform his or her employer or the party with whom he or she is under contract within 48 hours if convicted of any disqualifying offense while he or she is employed or under a resulting contract in that capacity.
- C. If it is found that a person who is employed or under contract in a capacity described in subsection (A) does not meet the level 2 requirements, the person shall be immediately suspended from working in that capacity and shall remain suspended until final resolution of any appeals.

9.38 PROHIBITION AGAINST CONSIDERING SOCIAL, POLITICAL OR IDEOLOGICAL INTERESTS IN GOVERNMENT CONTRACTING



Bidders are hereby notified of the provisions of Section 287.05701, Florida Statutes, as amended, that the City will not request documentation of or consider a Bidder's social, political, or ideological interests when determining if the Bidder is a responsible Bidder. Bidders are further notified that the City's governing body may not give preference to a Bidder based on the Bidder's social, political, or ideological interests.

SECTION 10 - SPECIAL TERMS & CONDITIONS

10.1 PROPOSAL SECURITY APPLICABILITY AND AMOUNT

A Proposal Security shall be required for every bidder, regardless of proposal amount. Proposal Security shall be in the amount of \$10,000 or 5% of the total cumulative base amount proposed, whichever is less.

Note - Contingency is not to be counted in the total amount that the proposal security is based on.

10.2 PROPOSAL SECURITY REQUIREMENTS

For projects in which Proposal Securities are required, each Proposal must be accompanied by a certified or cashier's check or by a Bid Bond made payable to the City of Pembroke Pines on an approved form, duly executed by the Proposer as principal and having as surety thereon a surety company acceptable to CITY and authorized to write such Bond under the laws of the State of Florida. The agent or attorney in fact or other officer who signs a Bid Bond for a surety company must file with such bond a certified copy of their power of attorney authorizing them to do so.

Scanned Proposal Security: For projects in which Proposal Securities are required, Proposers must submit a scanned copy of their Proposal Security (certified check, cashier's check or a Bid Bond) with their bid submittal through OpenGov.

Physical Proposal Security: For projects in which Proposal Securities are required, Proposers should also submit their original Proposal Security (certified check, cashier's check or a Bid Bond) at time of the bid due date, or they may be deemed as non-responsive. The original Proposal Security should be in a sealed envelope, plainly marked "**BID SECURITY - IFB # PSPW-25-10 Academic Village Cooling Tower**" and sent to the:

City of Pembroke Pines,
City Clerk's Office, 4th Floor,
601 City Center Way,
Pembroke Pines, Florida, 33025.

Opportunity to Cure: In the event that the proposer fails to submit the scanned and/or the physical proposal security, in the City's sole discretion, the City may allow the proposer to furnish the proposal security within 3 days of written notice of deficiency.

Successful Proposer: The Proposal Security of the Successful Proposer will be retained until such Proposer has executed the Contract and furnished the required insurance, payment and performance bonds, whereupon the Proposal Security will be returned. If the Successful Proposer fails to execute and deliver the Contract and furnish the required insurance and bonds within fifteen (15) calendar days of the Notice of Award, CITY may annul the Notice of Award and the entire sum of the Proposal Security shall be forfeited.

Three Lowest Proposers: The Proposal Security of the three (3) lowest Proposers will be returned within seven (7) calendar days after CITY and the Successful Proposer have executed the written

Contract or if no such written Contract is executed within ninety (90) calendar days after the date of the Proposal opening, upon the demand of any Proposer at any time thereafter, provided that the Proposer has not been notified of the acceptance of their Proposal.

All Other Proposers: Proposal Security of all other Proposer will be returned within seven (7) calendar days after the proposal opening.

10.3 PAYMENT AND PERFORMANCE BONDS

In the event that the awarded contract, not including owner's contingency, exceeds \$200,000, two (2) separate bonds (Payment & Performance Bonds) are required, and both must be approved by the City. The penal sum stated in each bond shall be 100% of the contract price.

Note - Contingency is not to be counted in the total amount that the payment and performance bonds are based on.

Coverage Period: The surety company shall only cover the period of performance / construction and not the labor warranty nor the manufacturer's warranty periods.

Successful Proposer: Within fifteen (15) calendar days after Notice of Award and in any event prior to commencing work, the Contractor shall execute and furnish to City a performance bond and a payment bond.

Minimum Requirements of Surety: Each bond shall be written by a corporate surety, having a resident agent in the State of Florida and having been in business with a record of successful continuous operation for at least five (5) years. The surety shall hold a current certificate of authority from the Secretary of Treasury of the United States as an acceptable surety on federal bonds in accordance with United States Department of Treasury Circular No. 570. If the amount of the Bond exceeds the underwriting limitation set forth in the circular, in order to qualify, the net retention of the surety company shall not exceed the underwriting limitation in the circular and the excess risks must be protected by coinsurance, reinsurance, or other methods, in accordance with Treasury Circular 297, revised September 1, 1978 (31DFR, Section 223.10, Section 223.11). Further, the surety company shall provide City with evidence satisfactory to City, that such excess risk has been protected in an acceptable manner. The surety company shall have at least the following minimum qualification in accordance with the latest edition of A.M. Best's Insurance Guide, published by Alfred M. Best Company, Inc., Ambest Road, Oldwick, New Jersey 08858:

B+ to A+

Performance Bond: The performance bond shall be conditioned that the Contractor performs the contract in the time and manner prescribed in the contract.

Payment Bond: The payment bond shall be conditioned that the Contractor promptly make payments to all persons who supply the Contractor with labor, materials and supplies used directly or indirectly by the Contractor in the prosecution of the work provided for in the Contract and shall provide that the surety shall pay the same in the amount not exceeding the sum provided in such bonds, together with interest at the maximum rate allowed by law; and that they shall indemnify and

save harmless the City to the extent of any and all payments in connection with the carrying out of said Contract which the City may be required to make under the law.

Recordation of Bonds with the County: Pursuant to the requirements of Section 255.05(1)(a), Florida Statutes, it shall be the duty of the Contractor to record the aforesaid payment and performance bonds in the public records of Broward County, with the Contractor to pay all recording costs.

10.4 OWNER'S CONTINGENCY

While the specifications contained in this solicitation and any ensuing Purchase Orders or contracts have incorporated all anticipated work to be accomplished, there may be unanticipated work required of the Contractor in conjunction with a specific project. For this reason, the City Commission may award a project with an "Owner's Contingency". This contingency or allowance authorizes the City execute change orders up to the amount of the contingency without the need to obtain additional Commission approval. The Owner's Contingency is usually based on a specified percent of the proposed project amount and is established for the specific project being performed under the contract. This dollar amount shall be shown on the specific project purchase order as a distinct item from the Contractor's overall offer to determine the total potential dollar value of the contract. It is hereby understood and agreed that the Contractor shall not expend any dollars in connection with the Owner's Contingency without the expressed prior approval of the City's authorized representative. Any Owner's Contingency funds that have not been utilized at the end of the project will remain with the Owner, the Contractor shall only be paid for the proposed project cost as approved by the City Commission along with any Owner Contingency expenses that were approved by the City's authorized representative.

10.5 TAX SAVER PROGRAM

The Contractor shall cooperate on certain projects to allow the City to avail itself of a sales tax savings program.

10.6 RELEASE OF LIEN

Contractor must provide an executed Partial/Final Release of Lien utilizing the City's standard Release of Lien Form in order for the City to release any payments to the Contractor.

10.7 SOLID WASTE CONSTRUCTION AND DEMOLITION DEBRIS COLLECTION AND DISPOSAL REQUIREMENTS

The City of Pembroke Pines has an exclusive solid waste franchise agreement with Waste Pro of Florida, Inc. for the collection and disposal of all solid waste including construction and demolition (C & D) debris. All applicants for bids to perform construction work for the City of Pembroke Pines shall be subject to the requirements found in the City's exclusive solid waste franchise agreement and must contract Waste Pro of Florida, Inc. for the collection and disposal of all construction and demolition debris generated at such construction job sites.



For the current applicable rates and fees for Waste Pro of Florida, Inc. dumpsters, roll-off containers, and other related solid waste service equipment needs, please contact David Perez, Waste Pro's Pembroke Pines Sales Representative at (954) 967-4200 or dperez@wasteprousa.com.

For further information related to the solid waste franchise requirements, please contact Rose Colombo, Solid Waste Franchise Agreement Contract Manager, at (954) 518-9011 or rcolombo@ppines.com.

For solid waste franchise enforcement questions, please contact the City of Pembroke Pines Code Compliance Unit at (954) 431-4466.

SECTION 11 - LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS

Contractor agrees to comply, subject to applicable professional standards, with the provisions of any and all applicable Federal, State, County and City orders, statutes, ordinances, rules and regulations which may pertain to the Services required under the Agreement, including but not limited to:

11.1 NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES

The City and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the City, Contractor, or any other party (whether or not a party to that Contract) pertaining to any matter resulting from the underlying Contract.

Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

11.2 ACCESS BY THE GRANTEE, SUBGRANTEE, FEDERAL GRANTOR AGENCY AND COMPTROLLER GENERAL

The Contractor shall allow access by the grantee, sub grantee, Federal grantor agency and Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the Contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts and transcriptions.

11.3 EQUAL EMPLOYMENT OPPORTUNITY

The Contractor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR Chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees).

All contractors and subcontractors performing work in connection with this Contract shall provide equal opportunity for employment because of race, religion, color, age, sex, national origin, sexual preference, disability or marital status. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in a conspicuous place available for employees and applicants for employment, such notices as may be required by any authority having jurisdiction over the Work setting forth the provisions of the nondiscrimination law.

11.4 DAVIS-BACON & RELATED ACTS

If construction, alternation or repair of public buildings or public works project is **funded or assisted under one or more Federal statute**, the Davis-Bacon prevailing wage provisions may apply to the project if any of the applicable statutes requires payment of Davis-Bacon wage rates.

The Davis-Bacon Act requires that each contract over \$2,000 to which the United States or the District of Columbia is a party for the construction, alteration, or repair of public buildings or public works shall contain a clause setting forth the minimum wages to be paid to various classes of laborers and mechanics employed under the contract. Under the provisions of the Act, contractors or their subcontractors are to pay workers employed directly upon the site of the work no less than the locally prevailing wages and fringe benefits paid on projects of a similar character.

In addition to the Davis-Bacon Act itself, Congress has added prevailing wage provisions to approximately 60 statutes which assist construction projects through grants, loans, loan guarantees, and insurance. These “related Acts” involve construction in such areas as transportation, housing, air and water pollution reduction, and health. Davis-Bacon wage determinations are to be used in accordance with the provisions of Regulations, 29 CFR Part 1, Part 3, and Part 5

11.5 COPELAND ANTI-KICKBACK ACT

- A. Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- B. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA or other administering Federal agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

11.6 CONTRACT WORK HOURS AND SAFETY STANDARDS

The Contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3702-3704) as supplemented by Department of Labor regulations (29 CFR Part 5).

11.7 FEDERAL CLEAN AIR AND WATER ACTS

Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387), and will report violations to FEMA and the Regional Office of the Environmental Protection Agency (EPA).

11.8 SUSPENSION AND DEBARMENT

Non-federal entities are subject to the non-procurement debarment and suspension regulations implementing Executive Orders 12549 and 12689, 2 CFR part 180. These regulations restrict

awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs or activities.

- A. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- B. The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- C. This certification is a material representation of fact relied upon by the City. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- D. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

11.9 ANTI-LOBBYING

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended). Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

This provision is applicable to all Federal-aid construction contracts and to all related sub-contracts which exceed \$100,000 (49 CFR 20).

- A. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal,

amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- C. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

11.10 RECYCLED PRODUCTS / RECOVERED MATERIALS

The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including, but not limited to, the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

11.11 MINORITY / WOMEN'S / LABOR SURPLUS FIRMS PARTICIPATION

In accordance with the requirements as stated in C.F.R. 200.321, the City encourages the active participation of minority businesses, women's business enterprises and labor surplus area firms as a part of any subsequent agreement whenever possible.

If subcontracts are to be let, through a prime contractor, that contractor is required to take the affirmative steps listed in items (1) through (5) below to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

- A. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- B. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- C. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

- D. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- E. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

11.12 COMPLIANCE WITH STATE ENERGY POLICY AND CONSERVATION ACT

CONTRACTOR shall comply with all mandatory standards and policies relating to energy efficiency contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

11.13 REPORTING & RETENTION OF RECORDS

Pursuant to 44 CFR 13.36(i)(7), CONTRACTOR shall comply with federal requirements and regulations pertaining to reporting, including but not limited to those set forth at 44 CFR 40 and 41, if applicable. Furthermore, both parties shall provide the U.S. Department of Housing and Urban Development, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representative access to any books, documents, papers, and records of CONTRACTOR which are directly pertinent to this contract for the purpose of making audits, examinations, excerpts, and transcriptions. Also, both Parties agree to provide FEMA Administrator or his authorized representative access to construction or other work sites pertaining to the work being completed under the Agreement. Notwithstanding any other requirement set forth in this solicitation or the resulting agreement, all required records shall be retained for at minimum three (3) years after final payments and all other pending matters are closed.

11.14 RIGHTS TO INVENTIONS

CONTRACTOR agrees that if this Agreement results in any copyrightable materials or inventions, the Federal Government reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish or otherwise use the copyright of said materials or inventions for Federal Government purposes.

11.15 NO OBLIGATION BY THE FEDERAL GOVERNMENT

The federal government is not a party to this contract and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

11.16 DHS SEAL, LOGO, AND FLAGS

CONTRACTOR shall not use DHS(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific federal pre-approval.

11.17 COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS

This is an acknowledgement that federal financial assistance will be used to fund the Agreement only. CONTRACTOR will comply with all applicable federal law, regulations, executive orders, policies, procedures, and directives.

11.18 FRAUDULENT STATEMENTS

CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 applies to CONTRACTOR's actions pertaining to this Agreement.

11.19 PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES

A. **Prohibitions.** Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons. Unless an exception applies, the CONTRACTOR and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:

1. Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
2. Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
3. Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or
4. Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

B. **Exceptions.** This Section does not prohibit CONTRACTOR from providing:

1. A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
2. Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles. By necessary implication and regulation, the prohibitions also do not apply to:

- a. Covered telecommunications equipment or services that:
 1. Are not used as a substantial or essential component of any system; and
 2. Are not used as critical technology of any system.
- b. Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

C. Reporting requirement. In the event CONTRACTOR identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information required of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information. The CONTRACTOR shall report the following information:

1. Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
2. Within ten (10) business days of submitting the information required of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services. The CONTRACTOR shall insert the substance of this clause, including this in all subcontracts and other contractual instruments.

11.20 DOMESTIC PREFERENCE FOR PROCUREMENTS

As appropriate, and to the extent consistent with law, the CONTRACTOR should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products. For purposes of this clause: Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. Manufactured products mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

11.21 LICENSE AND DELIVERY OF WORKS SUBJECT TO COPYRIGHT AND DATA RIGHTS

If applicable, the CONTRACTOR grants to CITY, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, CONTRACTOR will identify such data and grant to the CITY or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, CONTRACTOR will deliver to the CONTRACTOR data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by CONTRACTOR.

11.22 PERSONALLY IDENTIFIABLE INFORMATION

In accordance with 2 C.F.R. §200.303, regarding internal controls of a non-Federal entity, CONTRACTOR must guarantee the protection of all Personally Identifiable Information (PII) obtained. The program will enact necessary measures to ensure PII of all applicants is safeguarded as to avoid release of private information. If a CONTRACTOR or employee should experience any loss or potential loss of PII, the CITY shall be notified immediately of the breach or potential breach.

11.23 RIGHTS IN DATA

Except if otherwise agreed to in writing, the CITY shall have exclusive ownership of, all proprietary interest in, and the right to full and exclusive possession of all information, materials and documents discovered or produced by CONTRACTOR pursuant to the terms of this solicitation, including but not limited to reports, memoranda or letters concerning the research and reporting tasks required.

11.24 INSPECTION AND ACCEPTANCE

- A. The CITY has the right to review, require correction, if necessary, and accept the work products produced by the CONTRACTOR. Such review(s) shall be carried out within thirty (30) days so as to not impede the work of the CONTRACTOR. Any product of work shall be deemed accepted as submitted if the CITY does not issue written comments and/or required corrections within thirty (30) days from the date of receipt of such product from the CONTRACTOR.
- B. The CONTRACTOR shall make any required corrections promptly at no additional charge and return a revised copy of the product to the CITY within seven (7) days of notification or a later date if extended by the CITY.

- C. Failure by the CONTRACTOR to proceed with reasonable promptness to make necessary corrections shall be a default. If the CONTRACTOR's submission of corrected work remains unacceptable, the CITY may terminate the resulting contract (or the task order involved) or reduce the contract price or cost to reflect the reduced value of services received.

11.25 DOCUMENTATION OF COSTS

All costs shall be supported by properly executed payrolls, time records, invoices, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders or other accounting documents, pertaining in whole or in part to the Agreement, shall be clearly identified and regularly accessible.

11.26 DRUG FREE WORKPLACE

This certification is required by the regulations implementing Sections 5151- 5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 USC 701 et seq.), 7 CFR Part 3017, Subpart F, Section 3017-600, Purpose. The January 31, 1989, regulations were amended and published as Part II of the May 25, 1990 Federal Register (pages 21681-21691).

11.27 ADMINISTRATIVE, CONTRACTUAL OR LEGAL REMEDIES

If the Contractor fails to perform to the City's satisfaction any material requirement of the contract or is in violation of a material provision of the contract, the City shall provide written notice to the Contractor requesting that the breach or noncompliance be remedied within a set time frame outlined in the contract. Such provisions protect the Federal/State sponsor's interests and ensure the Contractor is fully aware of its responsibilities, as well as the remedies that will be available to the City and Federal/State sponsor for nonperformance. "Nonperformance" by the Contractor is any failure to follow the terms of the contract.

11.28 PROHIBITIONS OF GRATUITIES

By submission of a bid, the Contractor certifies that no employee of the Contractor has or shall benefit financially or materially from such bid or resulting contract. Any resulting contract issued as a result of this solicitation may be terminated at such time as it is determined that gratuities of any kind were either offered or received by any of the aforementioned persons.



ADDENDA REPORT
IFB No. PSPW-25-10
Academic Village Cooling Tower

RESPONSE DEADLINE: September 2, 2025 at 2:00 pm

Tuesday, September 16, 2025

Addenda Issued:

Addendum #1

Aug 4, 2025 12:44 PM

Please use the [See What Changed](#) link to view all the changes made by this addendum.

Addendum #2

Aug 6, 2025 5:20 PM

Please use the [See What Changed](#) link to view all the changes made by this addendum.

The questions and answer dates have been extended, the due date has also been extended. The City anticipates to issue an addendum on 8/11/2025.

Addendum #3

Aug 7, 2025 9:16 AM

Please note that a mandatory site visit has been scheduled for **Wednesday, August 20th at 2:00 PM**

Pembroke Pines Charter School, Academic Village Campus, 17189 Sheridan St. Pembroke Pines, FL 33331.

This visit is required to review the placement and connection details of the temporary cooling tower. All interested vendors must attend in order to be considered for this project.

An addendum will be provided on Monday, August 11th, which will include the specifications for the temporary cooling tower.

Addendum #4

Aug 13, 2025 4:16 PM

The site visit scheduled for **Thursday, August 14th** has been rescheduled.

The mandatory site visit is **tentatively** rescheduled to **Wednesday, August 20th at 2:00 PM**.

An addendum, which will include the specifications for the temporary cooling tower, will be provided no later than **Tuesday, August 19th**.

Addendum #5

Aug 13, 2025 4:24 PM

Please use the [See What Changed](#) link to view all the changes made by this addendum.

Question Due Date: August 25th

Bid Submission Deadline: September 2nd

Addendum #6

Aug 19, 2025 3:42 PM

Please use the [See What Changed](#) link to view all the changes made by this addendum.

Please be advised that the following attachments have been added to the project for your review and consideration.

Kindly ensure you review these documents as part of your proposal.

Please note that a mandatory site visit has been scheduled for Wednesday, August 20th at 2:00 PM

Pembroke Pines Charter School, Academic Village Campus, 17189 Sheridan St. Pembroke Pines, FL 33331.

This visit is required to review the placement and connection details of the temporary cooling tower. All interested vendors must attend in order to be considered for this project.

A map outlining the location where vendors should meet staff for this site visit has been attached to this addendum.

Attachments:

- [Pictures](#)
- [Sikagard 7600 VG](#)
- [1000 Ton Cooling Tower RSCT1000F2 Spec Sheet Draft\(Reymosa\)](#)
- [AV Cooling Tower Pre-bid Meeting Location](#)

Addenda Acknowledgements:

Addendum #1

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:18 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 15, 2025 1:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 13, 2025 8:38 AM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 6, 2025 9:19 AM	Maya Leshem

Addendum #2

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:18 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 15, 2025 1:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 13, 2025 8:38 AM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 26, 2025 1:56 PM	Maya Leshem

Addendum #3

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:19 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 15, 2025 1:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 13, 2025 8:38 AM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 27, 2025 2:11 PM	Maya Leshem

Addendum #4

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:19 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 15, 2025 1:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 28, 2025 3:06 PM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 27, 2025 2:11 PM	Maya Leshem

Addendum #5

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:19 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 15, 2025 1:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 28, 2025 3:06 PM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 27, 2025 2:11 PM	Maya Leshem

Addendum #6

Proposal	Confirmed	Confirmed At	Confirmed By
Con-Mech, Inc	X	Aug 31, 2025 2:36 PM	Yudel Cubillas
JCR Mechanical Contractor	X	Aug 28, 2025 2:19 PM	Julio Ronquillo
Carrier Corporation	X	Aug 20, 2025 11:44 AM	Bradley Katzman
Blizzard Air Conditioning	X	Aug 27, 2025 12:47 PM	Roberto Villaverde
Coltec Engineering, Inc.	X	Aug 28, 2025 3:06 PM	Lorenzo Fernandez
RGEN Enterprises LLC	X	Aug 27, 2025 2:11 PM	Maya Leshem



Submittal Data Package

Project:
Academic Village Cooling Tower Replacement

Customer:
Tom Barrow Co. - SFL

Representative:
Juan Gonzalez (NA - South)
✉ jgonzalez@tombarrow.com

Series 3000 Cooling Tower S3E-1222-06N-2/S

Background Information

BAC Quote Number:	90609	Line:	100
Revision:	2	Revision Name:	Revision 2
Purchase Order No:			

The submittal document is as configured by your Sales Representative as of the date 3/4/2025. Please note any future changes may require a revised submittal package and updated drawings.



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Cooling Tower

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Technical Datasheet

Cooling Tower

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Model Information

Product lineSeries 3000 Cooling Tower
Model.....S3E-1222-06N-2/S

Main Accessories

Intake option.....None
Discharge optionNone

Thermal Design Data

Requested capacity (unit)12,245.10 MBH
Maximum capacity (unit).....13,440.39 MBH
Reserve capacity9.54 %
Requested fluid flow1,750.00 gpm
Entering wet bulb temperature80.00 °F
Inlet temperature of process fluid99.00 °F
Outlet temperature of process fluid85.00 °F

Physical Data (per unit)

Overall length (not including all options and accessories).....23' 10"
Overall width (not including all options and accessories)21' 7"
Overall height (not including all options or accessories).....10' 11"
Shipping weight.....23,038 lbs
Operating weight.....47,598 lbs
Heaviest section11,519 lbs
Material optionJE PREMIER SERIES® Construction

Note: Exact unit dimensions and weights may be influenced by accessories/option combinations.

Wet Deck Surface

Wet deck surface materialPVC

Electrical Data (per unit)

Fan motor
Quantity.....2
BHP (net mech output power at motor shaft)50.0 HP
Fan motor power(2) 25.0 = 50.0 HP/Unit
Fan Drive SystemBALTIDRIVE® Power Train
Voltage230/460 V
Phase.....3 Phase
Frequency.....60 Hz
Protection classIP55
Efficiency class.....Premium Efficiency
Fan synchrone speed1,800
Frame sizeNEMA Frame 284T
Type1 Speed/1 Winding
EnclosureTEAO : Totally Enclosed Air Over/Airtight Motor

Aerodynamic Data (per unit)

Airflow (100% RPM/100% RPM)240,493 CFM
Number of fans2
Fan typeStandard Fan
Minimum distance required for single unit (For multiple units, refer to Layout Guidelines)
From solid wall with maximum air flow.....6.0 ft.
From 50% open wall with maximum air flow.....3.0 ft.

Energy Rating

USGPM/HP per ASHRAE 90.1 , ASHRAE 189 and CA Title 2464.98 USGPM/HP

Hydraulic Data (per unit)

Total pressure drop.....4.35 PSI
Static lift.....4.35 PSI

Special Requirement(s)

Notes:

- Thermal performance at design conditions and total standard fan motor power is CTI/ECC certified
- These unit dimensions do not account for any accessories. Please contact BAC for dimensions of units with accessories.
- Refer to unit print for detailed dimensions.

Our reference: 90609 100 / 2

Your reference: Academic Village Cooling Tower Replacement

- The values presented in this document are estimates only and are subject to change by BAC.



Sound Rating Cooling Tower

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Date: 3/4/2025

Project Name: Academic Village Cooling Tower Replacement
Project City: WEST PALM BEACH
Project Country: United States

Model Information

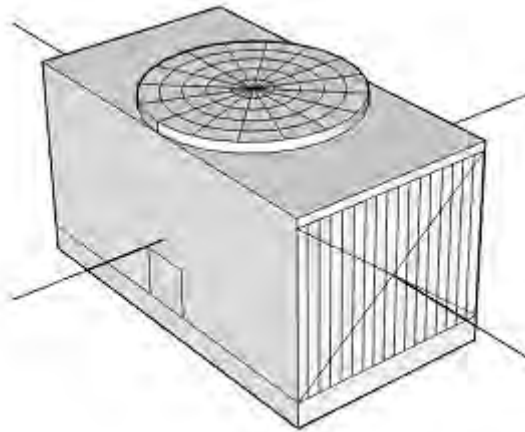
Product line: Series 3000 Cooling Tower
Model: S3E-1222-06N-2/S
Number of units: 1
Total pump motor power:
Total standard fan power: 100%, 50.0 HP/Unit
Fan type: Standard Fan
Fan motor: (2) 25.0 = 50.0 HP/Unit

Intake option: None
Discharge option: None

Octave band and A-weighted sound pressure levels (Lp) are expressed in decibels (dB) reference 0.0002 microbar. Sound power levels (Lw) are expressed in decibels (dB) reference one picowatt. Octave band 1 has a center frequency of 63 Hertz.

Air Inlet Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	84	71
2	86	70
3	84	72
4	78	68
5	71	63
6	65	55
7	60	49
8	57	45
A-wgtd	80	69

End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	79	72
2	79	67
3	77	68
4	70	63
5	66	58
6	58	49
7	51	44
8	49	39
A-wgtd	73	64



Top Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	87	77
2	88	77
3	86	77
4	83	71
5	80	66
6	74	62
7	70	57
8	69	54
A-wgtd	85	73

End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	79	72
2	79	67
3	77	68
4	70	63
5	66	58
6	58	49
7	51	44
8	49	39
A-wgtd	73	64

Air Inlet Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	84	71
2	86	70
3	84	72
4	78	68
5	71	63
6	65	55
7	60	49
8	57	45
A-wgtd	80	69

Sound Power (dB)		
Octave Band	Center Frequency (Hertz)	Lw
1	63	109
2	125	109
3	250	109
4	500	103
5	1000	98
6	2000	94
7	4000	89
8	8000	86
A-wgtd		105

Notes

- The use of VFDs can increase sound levels.
- The values presented in this document are estimates only and are subject to change by BAC.
- Sound rating is for a single unit.
- Sound data provided by 'ATC 128 (2019)' sound test code.
- Sound data is free field data valid for unit installation without elevation, not taking into account any reflections. Octave band values are shown for indicative purposes only. Values are obtained according to CTI ATC-128 (Test Code for Measurement of Sound From Water-Cooling Towers) for small towers.



Mechanical Specifications

Cooling Tower

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Date: 3/4/2025

Background Information

Customer:	Tom Barrow Co. - SFL		
Project:	Academic Village Cooling Tower Replacement		
BAC Quote Number:	90609	Line:	100
Revision:	2	Revision Name:	Revision 2
Purchase Order No:			
Engineer:			

Model Information

Product line:	Series 3000 Cooling Tower
Model:	S3E-1222-06N-2/S
Quantity:	1
Knockdown For Field Assembly?	No

Mechanical Specifications

Unit Type	Induced Draft, Crossflow Cooling Tower Factory fabricated, induced draft, crossflow cooling tower with vertical discharge.
Quality Assurance	Quality Assurance - ISO 9001 Compliant Each unit is manufactured under closely-controlled conditions using standardized parts to ensure each unit is built precisely to the same high-quality design and construction standards. The design, manufacture, and business processes of Baltimore Aircoil Company are ISO 9001 compliant.
CTI Certification	CTI Certified Thermal Performance The thermal performance of this BAC unit has been certified through performance tests conducted by the Cooling Technology Institute in accordance with their standard STD-201 RS. Your equipment may be selected for factory-testing to verify CTI certified performance. Such certification by an independent third party assures engineers and users that the published thermal capacities accurately reflect the actual unit performance. CTI certification eliminates the additional costs of on-site, individual unit testing, oversizing the equipment or operating cost penalties from deficient equipment.
Materials of Construction	JE PREMIER SERIES Construction All structural steel components are constructed from Type 304 stainless steel. All factory seams in the cold water basin will be welded to ensure watertight construction and shall be warranted against leaks for a period of five (5) years from date of shipment. Cold water basin includes a depressed section with drain/clean-out connection and the area under the fill sections is sloped toward the depressed section for easy cleaning. Hot water distribution basins are gravity type constructed of heavy gauge, Type 304 stainless steel. Polypropylene metering orifices are provided to assure even distribution of water over the wet deck surface. Heavy gauge, Type 304 stainless steel covers are furnished to prevent the accumulation of debris and algae in the hot water distribution basins.
Fan & Drive System	Standard Fan Driven by BALTIDRIVE® Power Train The fan is driven by a one-piece multi-groove, neoprene/polyester belt designed specifically for evaporative cooling equipment service. Motor is mounted on an adjustable motor base. Fan and motor sheaves are non-corrosive cast aluminum. The BALTIDRIVE® Power Train fan drive system, including fan motor, is warranted against defects in materials and workmanship for five (5) years from date of shipment. Fan and steel fan shaft are supported by heavy-duty, self-aligning, grease-packed, relubricatable ball bearings with special seals for protection against dust and moisture. All bearings are designed for minimum L10 life of 80,000 hours (280,000 hours average life).
Fan Guard	Stainless Steel Fan Guard A heavy gauge Type 304 stainless steel wire fan guard is provided over the fan cylinder.

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Your reference: Academic Village Cooling Tower Replacement

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Casing Panels	<p>Fiberglass Reinforced Polyester (FRP) Casing Panels</p> <p>Casing panels are constructed of fiberglass-reinforced polyester (FRP), UV Protected panels. Hinged access doors are provided on both side walls of the tower for access to eliminators and fan plenum section for all cells. The doors are made of a steel frame matching the unit construction, with an exterior overlay of FRP.</p>
Inlet Louvers	<p>FRP Air Inlet Louvers</p> <p>Air inlet louvers are wave-formed, fiberglass-reinforced polyester (FRP), spaced to minimize air resistance and prevent water splash-out.</p>
Fill	<p>PVC Fill & Drift Eliminators</p> <p>The BACross® Fill and integral drift eliminators are formed from self-extinguishing (per ASTM D-568) polyvinyl chloride (PVC), having a flame spread rating of 5 per ASTM Standard E84-77a, and are impervious to rot, decay, and fungus or biological attack. The fill is elevated above the cold water basin floor to facilitate cleaning. This fill is suitable for a maximum entering water temperature of 130°F (54.44°C). The eliminators are designed to effectively strip entrained moisture from the leaving airstream with a minimum of air resistance.</p>
Equipment Structure	<p>Upgraded Structure Designed in accordance with the IBC and ASCE/SEI 7</p> <p>The upgraded structure of this product has been designed and analyzed in accordance with the wind and seismic load requirements of the 2006 IBC, 2009 IBC, 2012 IBC, 2015 IBC, ASCE/SEI 7-05, and ASCE/SEI 7-10. Seismic qualification is based on analysis. For more information and specific wind and seismic load capacity ratings, please see the Certificate of Wind and Seismic Load Capacity.</p>
Water Inlet(s)	<p>End Inlet EASY CONNECT® Piping Arrangement</p> <p>Inlet water enters the EASY CONNECT® Piping Arrangement located on the end of the cell(s). Please see the submittal package for the connection type, size and location. The EASY CONNECT® Piping Arrangement balances the flow to each side of the tower and includes a plugged blow-down connection to permit purging of dirt and debris. Polyvinyl chloride (PVC) piping connects EASY CONNECT® Piping Arrangement Chamber to the hot water distribution basins.</p>
Water Outlet(s)	<p>End Outlet Pump Suction Connection</p> <p>A pipe stub connection(s) of a metal compatible with the cold water basin material and appropriately sized for design flow is provided. Please see the submittal package for the connection type, size and location. Also included is a large area, lift out strainer which matches the cold water basin material of construction and has perforated openings sized smaller than the water distribution nozzle orifices. Strainer includes anti-vortexing baffle to prevent air entrainment.</p>
Flume Box Options	<p>Less Flume Box</p> <p>The unit(s) are provided less flume box.</p>
Basin Water Level Control	<p>Mechanical Float Valves for Independent Cell Operation</p> <p>Each cell is provided with one make-up valve with unsinkable polystyrene filled plastic float arranged for easy adjustment. The make-up valve is suitable for water supply pressures between 15 psig (103 kPa) and 50 psig (345 kPa).</p>
Penn F63 Float Switch	<p>Penn F63 Float Switch</p> <p>The Single-Pole, Double-Throw (SPDT) Liquid Level Float Switch is provided in the cold water basin of the unit. When the level in the basin rises above or falls below the required level, the switch will close one circuit and open a second circuit.</p>
Vibration Cutout Switch	<p>Mechanical Vibration Cutout Switch with Alarm Contact</p> <p>Fan system is provided with a vibration cutout switch to limit damage to the unit in the event of a high vibration condition. The vibration switch, including external alarm capability, is mechanically tripped with a frequency range of 0 to 3,600 RPM and trip point of 0.2 to 2.0 g's. Switch rating is 10 amperes at a maximum 480 VAC, and 1/4 ampere at 250 Vdc. The remote reset and bypass time delay on start-up solenoid coil is powered by 110 Vac. Field wiring is by others.</p>
Internal Access Option	<p>Internal Walkway</p> <p>A G-235 (Z700 metric) galvanized steel walkway complying with OSHA standards and regulations provides access to the plenum to facilitate servicing the unit. Walkway submerged mounting supports match the cold water basin material of construction.</p>

Special Requirement(s)



Terms and Conditions of Sale

Cooling Tower

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Baltimore Aircoil Company, Inc. Terms and Conditions of Sale

Pricing: Prices set forth in Seller's quotation shall remain firm for thirty (30) days. Within such period, the quotation shall convert into an order provided that all of the following have occurred: (1) Buyer submits either a purchase order or a copy of Seller's quotation displaying an authorized signature of Buyer within that thirty (30)-day period; (2) Buyer provides a release for fabrication; and (3) Buyer requests a shipment date that is no later than twelve (12) weeks from the date of Buyer's submission of a purchase order or signed quotation. In the event Buyer's requested shipment date is later than twelve (12) weeks beyond such submission date, Seller's price in effect twelve (12) weeks prior to such shipment date shall apply. In the event that Buyer requests for its convenience that Seller delay delivery of products subject to an order beyond the scheduled shipment date, pricing shall be subject to the same adjustment.

Payments: Terms of payment shall be net cash in thirty (30) days from date of invoice, subject to Seller's prior credit approval. If the Buyer shall fail to make any payments in accordance with the terms and conditions of sale, the Seller, in addition to its other rights and remedies but not in limitation thereof, may, at its option, without prior notice, cancel this order as to any undelivered products or defer shipments or deliveries hereunder, or under any other agreement between Buyer and Seller, except upon Seller's receipt of cash before shipment or such security as Seller considers satisfactory. Seller reserves the right to impose an interest charge (not exceeding the lawful maximum) on the balance of each invoice not paid on its due date for the period from the due date to the date of receipt of payment by Seller. In the event Buyer's failure to make timely payments to Seller results in Seller incurring additional costs, including but not limited to collection expenses and attorneys' fees, said costs shall be added to the amount due Seller from Buyer. Buyer shall have no right to any discount or retainage and shall not withhold payment as a set-off on Seller's invoice in any amount.

Taxes: Unless listed on the front (reverse) side of this document, prices do not include any federal, state or local sales, use or value-added taxes payable in connection with this order. All such taxes shall be paid by Buyer. Buyer shall indemnify Seller from and against such taxes, plus interest and penalties thereon, including, but not limited to, tax, interest and penalties resulting from a failure to collect such taxes because of Seller's reliance upon an invalid exemption certificate provided to Seller.

Allocation of Risk: Deliveries shall be considered made Ex-works BAC Factory. At such time, title to the goods and all risk of loss, or damage shall pass to Buyer.

Force Majeure: Seller shall under no circumstances be liable for any loss or damage resulting from delay or failure in the performance of its obligations under this contract to the extent that such performance is delayed or prevented by: fires, floods, war, terrorist activities, riots, strikes, freight embargoes or transportation delays, shortage of labor, inability to secure fuel, material, supplies or power at current prices, or on account of shortages thereof; acts of God or of the public enemy; any existing or future laws or acts of the federal, state or local government (including specifically, but not exclusively, any orders, rules or regulations issued by any official or agency of any such government) affecting the conduct of Seller's business with which Seller in its judgment and discretion deems it advisable to comply as a legal or patriotic duty, or to any case beyond the Seller's reasonable control.

Warranties: Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of five (5) years from date of shipment: fans, fan shafts, fan motors, bearings, sheaves, gearboxes, driveshafts, couplings, and mechanical equipment support. Exceptions and details of option-specific warranties follow:

- **TrilliumSeries® Adiabatic Condenser and Cooler** Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twenty-four (24) months from the date of equipment startup or thirty (30) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of two (2) years from date of shipment: fans and fan motors. The sump and drain pans are warranted against leaks for a period of two (2) years from the date of shipment. Only leaks from the factory seams of the cold-water basin are covered; this warranty does not apply to sump field connections, field-installed options, or modifications by others. Seller does not warrant in any form parts that are considered to be consumable such as Adiabatic® Pre-Cooler Pads.
- **TrilliumSeries® Dry Coolers** Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of five (5) years from date of shipment: fans, fan shafts, fan motors, bearings, sheaves, and mechanical equipment support. This warranty does not apply to field-installed modifications by others. Seller does not warrant in any form parts that are considered to be consumable.
- **JE Premier Series® Construction** is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment.
- **EVERTOUGH™ Construction** is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment excluding heat transfer coils which are warranted to be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first.
- **TriArmor® Corrosion Protection System** Cold Water Basins are warranted against leaks and corrosion for a period of ten (10) years from date of shipment. For the purposes of this warranty, "corrosion" means red rust formation on the interior of the cold water basin panels due to a failure of the TriArmor Corrosion Protection System. The leak or corrosion must be caused by a defect in the application of the TriArmor Corrosion Protection System. This warranty does not apply to cold water basin field connections, field installed options or modifications by others.
- **Welded 304 Stainless Steel** Cold Water Basins are warranted against leaks for a period of five (5) years from date of shipment. Only leaks from the factory seams of the cold water basin are covered; this warranty does not apply to cold water basin field connections, field installed options or modifications by others.
- **ENDURADRIVE® Fan System** motor is warranted to be free from defects in material and workmanship for a period of seven (7) years from date of shipment with factory authorized start up or five (5) years without factory authorized start up. The ENDURADRIVE Fan System variable frequency drive is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment with factory authorized start up or one (1) year without factory authorized start up.
- **BAC Refrigeration Controls** are warranted to be free from defects in material and workmanship for a period of three (3) years from date of shipment with factory authorized start up or two (2) years without factory authorized start up.
- **Replacement Parts** provided by Seller under its original equipment warranty obligations are warranted against defects in materials and workmanship for a period of twelve (12) months from date of shipment or until expiration of their original warranty, whichever occurs first. Parts purchased after expiration of the original equipment warranty are warranted against defects in materials and workmanship for a period of twelve (12) months from date of shipment.
- **Original Equipment Fan Motors** are warranted against defects in materials and workmanship for a period of seven (7) years from date of shipment when space heaters are field-wired at time of initial installation per the motor nameplate.

Written notice of any defect shall be given to Seller immediately upon discovery by Buyer, and shall fully describe the claimed defect. Defective parts shall be repaired or replaced F.O.B. point of shipment, provided that inspection by Seller verifies the claimed defect(s). This shall be Buyer's exclusive remedy. **This warranty does not cover the costs of removing, shipping or reinstalling the equipment. Repairs made without the prior written approval of Seller shall void all warranties covering material and workmanship.** Any descriptions of the product(s) in the contract are for the sole purpose of identification and do not constitute a warranty. In the interest of product improvement, Seller reserves the right to change specifications and product design without incurring any liability therefore. The foregoing express warranties or those set forth elsewhere on this document are the only warranties of Seller applicable to the product(s) sold under this contract. **All other warranties, whether verbal or written, and all warranties implied by law, including any** warranties of merchantability or fitness for a particular purpose, are hereby excluded. Failure on the part of Buyer or of other parties to properly maintain the product(s) sold under this contract, or the operation of such product(s), by Buyer and/or other parties under conditions more severe than those for which such product(s) were designed, shall void all warranties covering materials and workmanship. Seller's warranties do not apply to defects in product(s) for which payment in full has not been received by Seller, and said warranties do not cover normal wear and tear or the erosion, corrosion and/or deterioration of the product(s) from unusual causes. No warranties by Seller shall apply to accessories manufactured by others, inasmuch as they are warranted separately by their respective manufacturers, except as stated above. Buyer assumes liability for and shall bear the costs of compliance with all laws, regulations, codes standards or ordinances applicable to the location, operation and maintenance of the product(s) sold under this contract, including those requirements pertaining to the distances between such product(s) and air-conditioning system duct intakes. No representative or agent of Seller is authorized to enlarge upon the express warranties of Seller.

Cancellation/Changes/Returns: Cancellation of or changes in any order by Buyer shall not be effective without Buyer's notice thereof received, agreed to, and confirmed in writing by Seller. If Seller, in its absolute discretion, approves Buyer's cancellation of an order, Buyer agrees to pay a reasonable cancellation charge. Seller's prior written consent must be obtained before Buyer returns any products, and when so returned will be subject to a handling charge and transportation costs payable by Buyer.

Liability/Indemnification: Seller shall not be liable for any damages caused by delay in delivery of the products. Buyer shall hold harmless and indemnify Seller from and against all liability, claims, losses, damages, and expenses (including attorneys' fees) for personal injury and property damage arising out of Buyer's improper unloading, handling, or use of the products subject to this order, and for Buyer's infringement of another's property rights. The Seller's maximum liability from any causes whatsoever, whether in breach of contract, tort (including negligence), strict liability, or otherwise, shall not exceed the contract price. Neither Buyer nor Seller shall in any event be liable to the other, whether such liability arises out of breach of contract, tort (including negligence), strict liability or any other cause or form of action, for any consequential, special, indirect or incidental damages, including but not limited to loss of actual or anticipated profits or loss of use arising out of this contract, other than such damages resulting from the willful misconduct of Buyer or Seller.

Storage: In the event that Buyer is unable to accept delivery of goods and the Seller is required to hold goods beyond two (2) working days from fabrication completion, a storage fee equal to the greater of \$200/day or 0.20% of the total order value/day will be assessed by Seller for every day beyond two (2) working days from fabrication date which it is required to store goods on behalf of Buyer. Storage will be assessed monthly and will need to be paid in full prior to a new shipment date being scheduled.

Government Contracts: If Buyer's purchase order is for products to be used in the performance of a U.S. Government contract, those clauses of applicable procurement regulations mandatorily required by federal law to be included in U.S. Government subcontracts shall be incorporated herein by reference.

Export Transactions: Buyer shall comply with all applicable export laws and regulations of the U.S. Government, and shall hold harmless and indemnify Seller from and against all liability, damages, and expenses (including attorneys' fees) incurred by Seller as a result of Buyer's violation of any U.S. Government export and/or international antiboycott laws or regulations. Buyer certifies that it will be the recipient of the products to be delivered by seller. Buyer acknowledges that products are subject to export/import control laws of various countries, including the Export Administration Regulations of the United States. Products sold by seller cannot be transferred, sold or re-exported to any party on the Entity List or Restricted Persons list of the

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Replacement

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US Department of Commerce Bureau of Industry and Security, any party designated by the US Treasury Department Office of Foreign Asset Control and any party debarred or sanctioned for proliferation or terrorism reasons by the US State Department.

Agreement of Sale: Buyer's order is accepted on the terms and conditions stated herein and Seller's acceptance of Buyer's order is expressly made conditional upon Buyer's assent to such terms and conditions, including any of Seller's terms and conditions which may be additional to or different from those contained in Buyer's purchase order or otherwise. Such assent shall be deemed to have been given unless written notice of objection to any such terms and conditions (including inconsistencies between Buyer's purchase order and this acceptance) is given by Buyer to Seller promptly upon receipt of this acknowledgment. Any agreement or understanding, oral or written, which modifies or waives the terms and conditions herein (whether contained in Buyer's purchase order or other documentation) shall be deemed material and shall be rejected unless hereafter agreed to in writing and signed by Seller's authorized officer. Waiver by Seller of any breach or default hereunder shall not be deemed a waiver by Seller of any other or subsequent breach or default which may thereafter occur. Neither the rights nor the obligations of either Buyer or Seller are assignable without the prior written consent of the other party. This agreement of sale and all rights and obligations of Buyer and Seller shall be governed by and construed in accordance with the laws of the State of Maryland.

An electronic copy of the latest version is available online at www.baltimoreaircoil.com/terms.

(Revised –

8/23/2024)



Submittal Data

Cooling Tower

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Date: 3/4/2025

Background Information

Customer: Tom Barrow Co. - SFL
Project: Academic Village Cooling Tower Replacement
BAC Quote Number: 90609 **Line:** 100
Revision: 2 **Revision Name:** Revision 2
Purchase Order No:
Representative: Juan Gonzalez (NA - South)
✉ jgonzalez@tombarrow.com

MODEL INFORMATION

Product line: Series 3000 Cooling Tower
Model: S3E-1222-06N-2/S
Quantity: 1

Certified Capacity Per Unit:

Maximum capacity (unit):	13,440.39 MBH
Water Flow Rate per Unit (GPM):	1,750.00 gpm
Entering Water Temp (°F):	99.00 °F
Entering Wet Bulb Temp (°F):	80.00 °F
Leaving Water Temperature (°F):	85.00 °F

Fan Motor(s):

Enclosure:	TEAO : Totally Enclosed Air Over/Airtight Motor
Fan Drive System:	BALTIDRIVE® Power Train
Total standard fan power:	100%, 50.0 HP/Unit
Fan motor:	(2) 25.0 = 50.0 HP/Unit
Voltage:	230/460 V
Frequency:	60 Hz
Phase:	3 Phase
Type:	1 Speed/1 Winding
Quantity:	1
Horsepower Motor A:	25.0 HP
Fan Motor Options A:	Space Heater
Add Shaft Grounding Ring?:	No

Execution:

Notes:

Drawings And Diagrams			
Drawing Type		Drawing Number	
Unit Print.....		UP-90609-100	
Unit Support.....		SS-90609-100	
Center of Gravity		CG-90609-100	
Basin Accessories.....		BA-90609-100	
Motor Location		ML-90609-100	
Drawing Type		Drawing Number	
Space Heater Wiring		SW-90609-100	
VCOS Location.....		VL-90609-100	
VCOS Wiring.....		VW-90609-100	
Internal Access		IA-90609-100	
IBC Certificate.....		IC-90609-100	



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Data Version 1.40
DWG Version 1.0

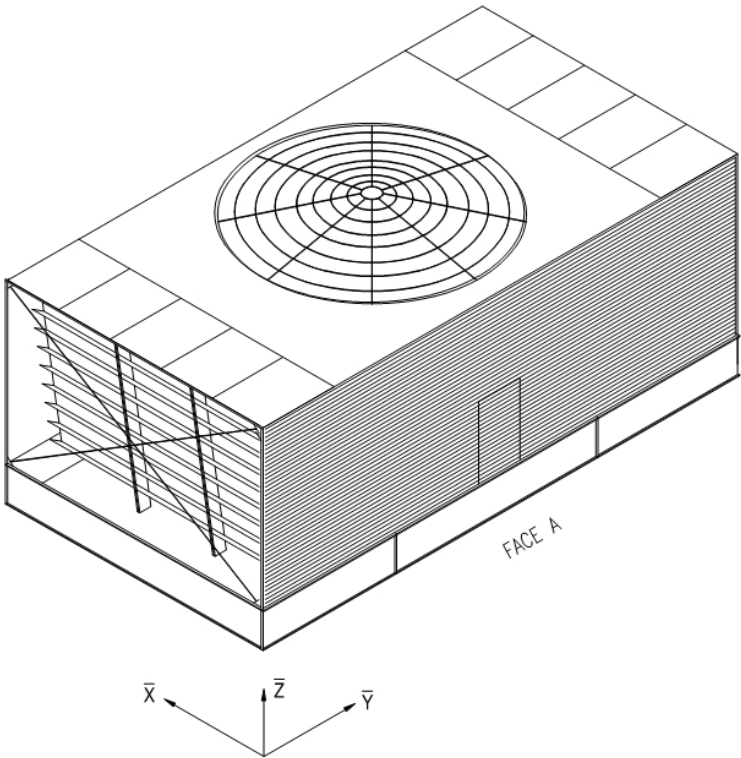
UNIT CENTER OF GRAVITY

\bar{X}		\bar{Y}		\bar{Z}	
DRY	OPERATING	DRY	OPERATING	DRY	OPERATING
6'-3 3/4"	6'-0 3/4"	10'-10 1/2"	10'-9 1/2"	4'-10"	3'-11"

WEIGHT BREAKDOWN FOR
FIELD INSTALLED ACCESSORIES

- VELOCITY RECOVERY STACK (EACH): N/A
- INTAKE ATTENUATION (EACH): N/A
- DISCHARGE ATTENUATION (PER CELL): N/A
- FAN COWL EXTENSIONS (EACH): N/A
- LOUVER FACE PLATFORMS (EACH): N/A
- ACCESS DOOR PLATFORMS (EACH): N/A
- EXTERNAL MOTOR PLATFORMS (EACH): N/A
- FAN DECK EXTENSION (EACH): N/A
- FAN DECK HANDRAILS (TOTAL): N/A

Notes
1) Drawings are not to scale.
2) Accessory weights shown above are included in the total unit Operating, Shipping and Heaviest Section values located on the Unit Print and Unit Support drawings. Ladder and cage weights are not shown above but are included in the totals.
3) These accessories ship loose for field assembly and installation.



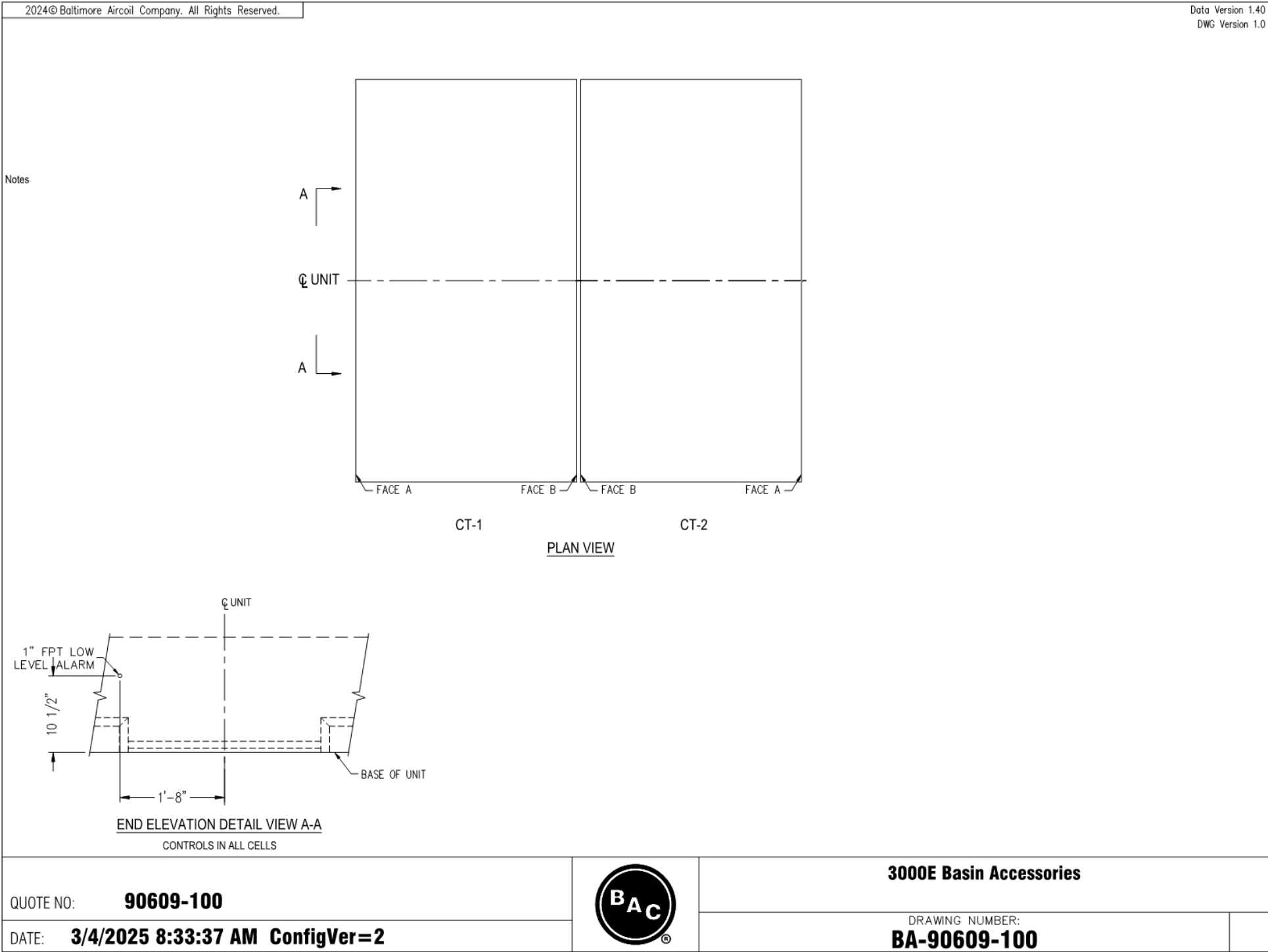
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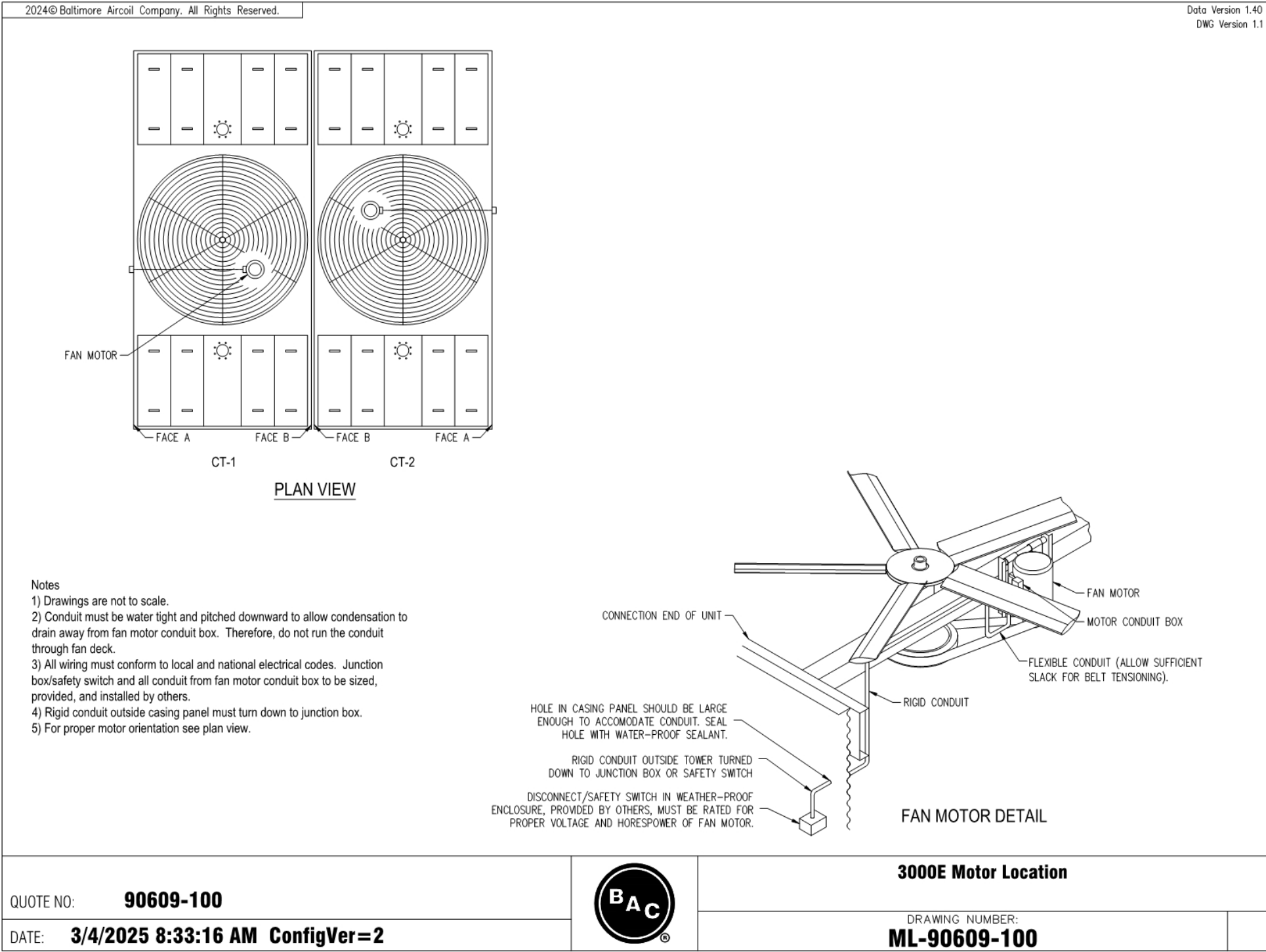
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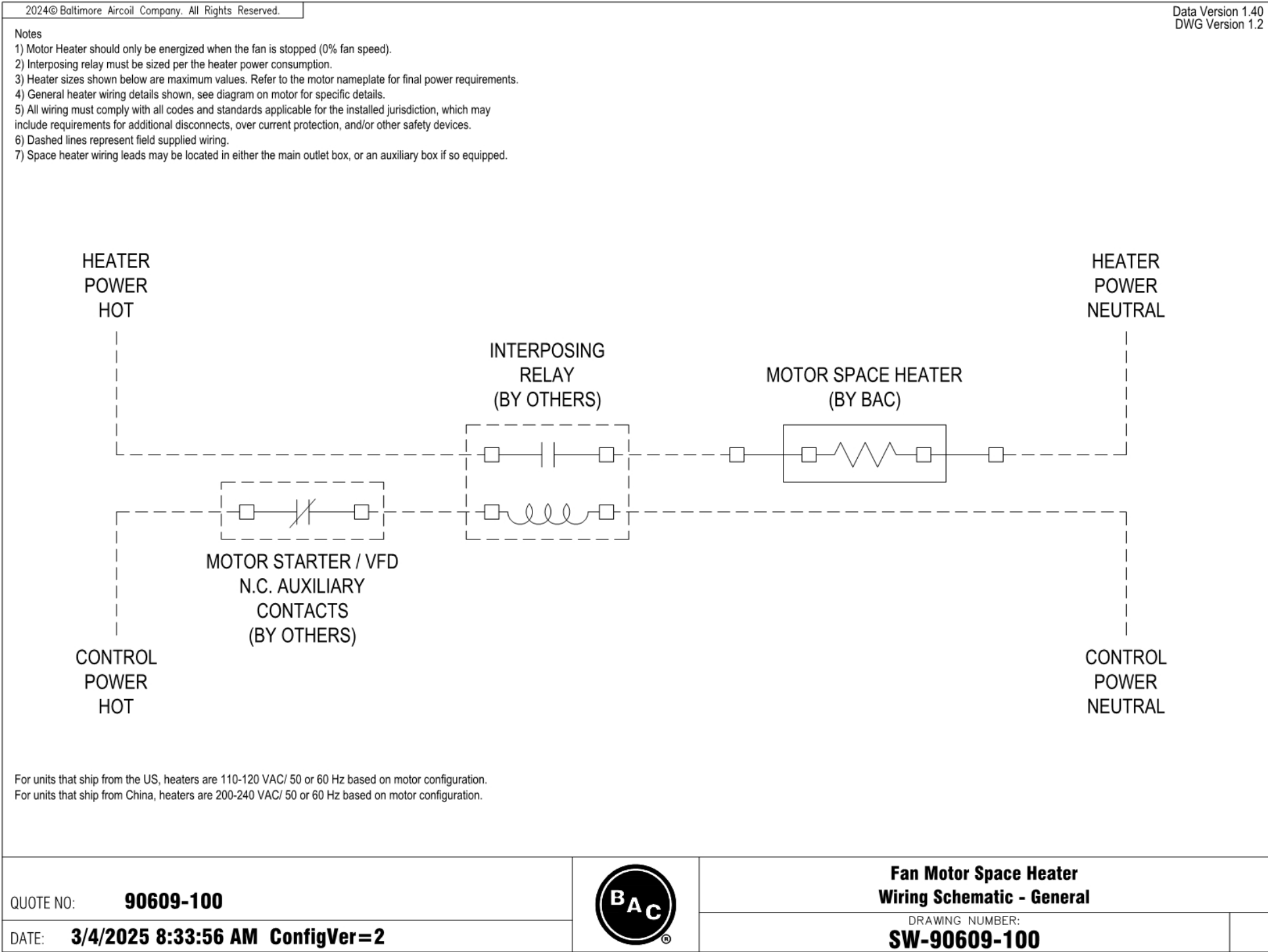
3000E Center of Gravity

DRAWING NUMBER:
CG-90609-100





QUOTE NO: 90609-100		3000E Motor Location	
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OPERATING INSTRUCTIONS

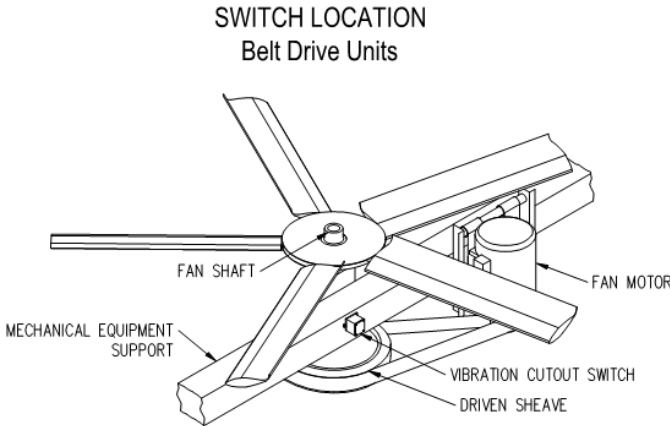
Follow the installation drawings and wiring diagram to ensure the proper operation of the vibration switch. Direct any questions to your local BAC Representative.

NOTE

Moisture inside the switch can lead to switch failure. Care must be taken when replacing the cover on the vibration switch to ensure that the proper watertight seal is obtained.

CAUTION

Before performing any maintenance, adjustment or inspection of the switch, make certain that all power has been disconnected and locked in the off position.



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VCOS Location

DRAWING NUMBER:
VL-90609-100



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NOTES:

1. LOCAL PUSH BUTTON RESET.

2. TO MAINTAIN HAZARDOUS DUTY RATINGS, THE FACTORY INSTALLED WATER TIGHT CONNECTION FITTINGS MUST BE REMOVED AND THE NINE CONDUCTOR CABLE MUST BE ROUTED INSIDE OF A SUITABLE EXPLOSION PROOF CONDUIT. NOTE: THE CONNECTORS CAN EASILY BE REMOVED WITHOUT HAVING TO UN-WIRE THE CONDUCTORS FROM INSIDE THE CUTOUT SWITCH.

3. THE MECHANICAL VIBRATION CUTOUT SWITCH COMES WITH TWO WATER TIGHT CONDUIT/CABLE CONNECTORS. ONE CONNECTOR IS USED TO PROVIDE A WATER TIGHT CONNECTION TO THE VIBRATION CUTOUT SWITCH AND THE OTHER IS PROVIDED FOR THE ELECTRICIAN TO CONNECT THE WIRE CABLE TO A JUNCTION BOX LOCATED IN THE VICINITY OF THE VIBRATION CUTOUT SWITCH.

4. THE SWITCHES IN THE NORMALLY CLOSED CIRCUITS (BLACK WIRE FOR SW-1 AND YELLOW WIRE FOR SW-2) WILL OPEN WHEN THE DEVICE EXPERIENCES VIBRATION LEVELS ABOVE THE SETPOINT VALUE. IF REVERSE CONTROL LOGIC IS DESIRED, CUT OFF BUTT END CONNECTORS ON WHITE AND/OR BROWN WIRES AND THEN INSTALL WIRE NUT OR BUTT CONNECTOR ON NORMALLY CLOSED WIRES (BLACK AND/OR YELLOW).

5. THIS MECHANICAL VIBRATION CUTOUT SWITCH COMES WITH TWO SINGLE POLE DOUBLE THROW SWITCHES. BOTH SWITCH CONTACTS ARE "DRY CONTACTS" WHICH CAN BE SUCCESSFULLY USED DIRECTLY IN THE FAN STARTER CONTROL CIRCUIT (TYPICALLY A/C VOLTAGE) CIRCUIT OR IN A BUILDING MANAGEMENT SYSTEM (TYPICALLY D/C VOLTAGE). CONTACT RATINGS: 3 AMPS@ 125 OR 480 VAC, 1/2 AMP@ 125 VDC, 1/4 AMP@ 250 VDC.

6. **CAUTION:** MOISTURE INSIDE THE SWITCH CAN LEAD TO SWITCH FAILURE. CARE MUST BE TAKEN WHEN REPLACING THE COVER ON THE VIBRATION SWITCH TO ENSURE THAT THE PROPER WATERTIGHT SEAL IS OBTAINED.

ADJUSTMENTS OF BAC MECHANICAL VIBRATION CUTOUT SWITCH

BAC RECOMMENDS THAT EACH VIBRATION CUTOFF SWITCH BE FIELD ADJUSTED AT START-UP TO OPTIMIZE THE TRIP POINT RELATIVE TO THE FINAL MOUNTING POSITION AND VIBRATION CHARACTERISTICS OF THE INSTALLED EQUIPMENT.

NOTE: INSTALLATION AND ADJUSTMENT MUST BE PERFORMED BY QUALIFIED, COMPETENT TECHNICIAN

1. FOR YOUR SAFETY, TURN OFF, THEN LOCK & TAG-OT THE ELECTRICAL SUPPLY TO THE FAN MOTOR(S).

2. PUSH IN THE MANUAL RESET SWITCH TO ENSURE UNIT IS IN UNTRIP STATE (USING AN OHMMETER, VERIFY THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS CLOSED. THE SWITCH COMES WITH PRE-WIRED CABLE SO OPENING THE SWITCH IS **NOT** NECESSARY TO PERFORM THIS TASK. IF CIRCUIT IS OPEN (TRIPPED STATE) SKIP STEP 3 AND GO TO STEP 4.

3. TURN ADJUSTMENT SCREW CONTERCLOCKWISE (CCW) 1/8 TURN AT A TIME UNTIL THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS OPEN (TRIPPED STATE)

4. ONCE TRIPPED, ROTATE ADJUSTMENT SCREW ¼ TURN CLOCKWISE (CW) AND THEN PUSH IN MANUAL RESET BUTTON (THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS CLOSED)

5. START UP FAN(S) TO DETERMINE IF THE START-UP WILL CAUSE THE CUT-OUT SWITCH TO TRIP.

a. IF THE VIBRATION CUTOUT SWITCH DOES NOT TRIP:

i. START AND STOP THE FAN TWO MORE TIMES AND IF THE CUTOUT SWITCH STILL DOES NOT TRIP, THEN CALIBRATION IS COMPLETE.

b. IF THE VIBRATION CUTOUT SWITCH DID TRIP:

i. TURN OFF, THEN LOCK & TAG-OUT THE ELECTRICAL SUPPLY TO THE FAN MOTOR(S).

ii. ADJUST THE SET POINT SCREW AN ADDITIONAL ¼ TURN CW AND THEN PUSH IN THE RESET BUTTON.

iii. RE-START THE FAN(S) TO DETERMINE IF THE START-UP WILL CAUSE THE SWITCH TO TRIP.

NOTE: REPEAT THIS ADJUSTMENT PROCESS (STEP 5.b.i-5.b.iii) UNTIL THE UNIT DOES NOT TRIP.

iv. ONCE THE FINAL ADJUSTMENT HAS BEEN MADE, START AND STOP THE FAN TWO MORE TIMES AND IF THE CUOUT SWITCH STILL DOES NOT TRIP, THEN CALIBRATION IS COMPLETE.

COMBINATION REMOTE ELECTRICAL RESET AND TIME DELAY START-UP:

1. THE REMOTE RESET AND TIME DELAY ON START-UP SOLENOID ELECTRICAL CIRCUIT SHOULD BE ENERGIZED (VOLTAGE APPLIED) WHENEVER THE FAN IS ON AND DE-ENERGIZED WHENEVER THE FAN IS OFF.

2. THE REMOTE RESET AND TIME DELAY ON START-UP CIRCUIT CONSISTS OF AN ELECTRICAL SOLENOID IN SERIES WITH A THERMISTOR. WHEN THE RATED VOLTAGE IS CONTINUALLY PROVIDED TO THE SOLENOID CIRCUIT AT START-UP, THE RESET SOLENOID BECOMES ENERGIZED FOR APPROXIMATELY 30 SECONDS AFTER WHICH TIME THE HEATED THERMISTOR CAUSES THE SOLENOID TO AUTOMATICALLY BECOME DE-ENERGIZED. THIS ACTION PROVIDES A TRIP LOCKOUT (BYPASS) DURING MACHINE START-UP FOR APPROXIMATELY 30 SECONDS.

3. WHEN THE FAN(S) IS SHUT DOWN, THE VOLTAGE TO THE SOLENOID ELECTRICAL CIRCUIT MUST BE REMOVED TO ALLOW THE THERMISTOR TIME TO COOL OTHERWISE THE START-UP DELAY WILL BE BYPASSED. ONCE THE THERMISTOR COOLS DOWN, THE SWITCH CAN BE REMOTELY RESET BY MOMENTARILY APPLYING VOLTAGE TO THE SOLENOID ELECTRICAL CIRCUIT. IT CAN ALSO BE RESET MANUALLY BY DEPRESSING THE PUSH BUTTON SWITCH. IF START-UP BYPASS IS UNDESIRED, THEN THE VOLTAGE MAY BE LEFT ON WHEN THE FAN IS OFF HOWEVER THE REMOTE RESET WILL NOT FUNCTION UNTIL THE VOLTAGE IS REMOVED AND THE THERMISTOR HAS HAD TIME TO COOL DOWN.

WIRING OF VIBRATION CUTOUT SWITCHES ON UNITS WITH MULTIPLE MOTORS OR CUTOUT SWITCHES:

VIBRATION CUTOUT SWITCHES SHOULD BE WIRED TO SHUT OFF ALL MOTORS ON THE ASSOCIATED FAN DRIVE SYSTEM. THIS MAY REQUIRE WIRING MULTIPLE CUTOUT SWITCHES TO SHUT OFF A SINGLE MOTOR OR WIRING A SINGLE CUTOUT SWITCH TO SHUT OFF MULTIPLE MOTORS. CONTACT YOUR CONTROLS INTEGRATOR FOR DETAILS ON HOW TO WIRE MULTIPLE SWITCHES.

MECHANICAL VIBRATION CUT-OUT SWITCH

(SEE NOTE 5)

LOCAL RESET (SEE NOTE 1)

WATERTIGHT SEAL (SEE NOTE 6)

MOUNTING PLATE

7" FLEXIBLE JACKET

SETPOINT ADJUSTMENT

CUSTOMER WIRES (FOR HAZARDOUS RATINGS SEE NOTE 2)

WATER PROOF CONDUIT CONN (SEE NOTE 3)

WIRING DIAGRAM

(TWO-SINGLE POLE DOUBLE THROW SWITCHES - SEE NOTE 5)

TO FAN STARTER

TO ALARM

SWITCH 1

SWITCH 2

110 VOLT (VAC) REMOTE RESET AND TIME DELAY COIL

CASE GROUND

SOLENOID COIL

(WHITE)

(RED)

(BLACK)

(BROWN)

(ORANGE)

(YELLOW)

(BLUE)

(VIOLET)

(GREEN)

N.O.

COMMON

N.C.

BEFORE PERFORMING ANY MAINTENANCE, ADJUSTMENT OR INSPECTION OF THE SWITCH, MAKE CERTAIN THAT ALL POWER HAS BEEN DISCONNECTED AND LOCKED IN THE OFF POSITION.

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BAC

Mechanical VCOS Wiring

With Remote/Local Reset, Alarm & Delay (110 VAC)

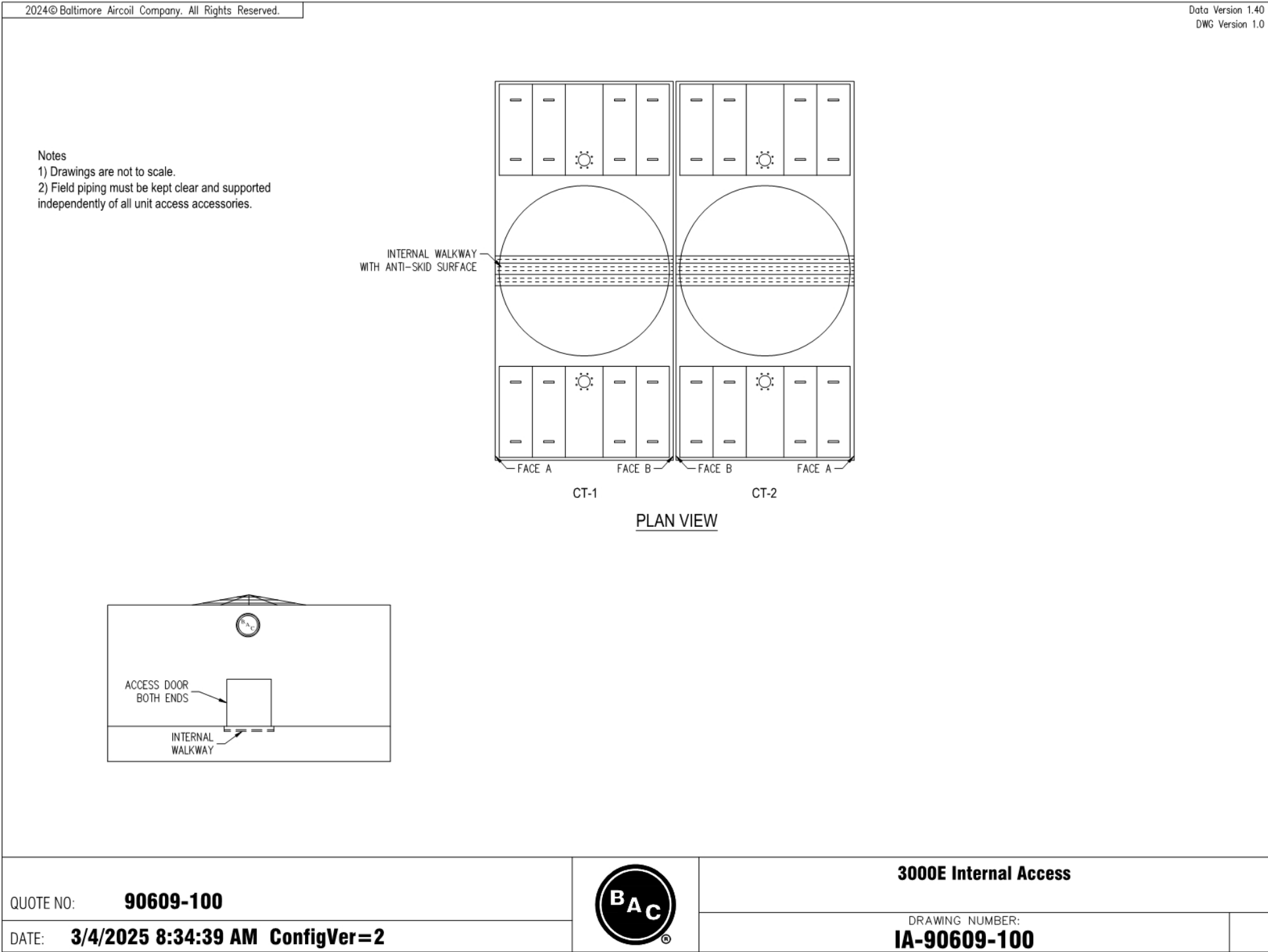
DRAWING NUMBER: VW-90609-100

Our reference: 90609 100 / 2
Your reference: Academic Village Cooling Tower Replacement

www.BaltimoreAircoil.com



Internal Access





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Certificate of Wind and Seismic Load Capacity

2006, 2009, 2012, and 2015 International Building Codes (IBC)

Product Line:	Series 3000 Open Cooling Tower
Model:	S3E-1222-06N-2/S



The Baltimore Aircoil Company evaporative cooling product referenced in this certificate has been designed and analyzed in accordance with the wind and seismic load requirements of the 2006 IBC, 2009 IBC, 2012 IBC, 2015 IBC, ASCE/SEI 7-05, and ASCE/SEI 7-10. Seismic qualification is based on analysis.

Wind and seismic load capacities for the referenced unit are provided below. It is the responsibility of the purchaser to determine the suitability of this unit for the specific application. Field modifications to the unit may void this certificate.

Wind Load Rating		
Horizontal Pressure (psf):	$p_h = 138.00$	in accordance with ASCE/SEI 7-05
Horizontal Pressure (psf):	$p_h = 138.00$	in accordance with ASCE/SEI 7-10
Vertical Uplift Pressure (psf):	$p_v = 109.00$	
Conditions:	The unit is supported and anchored as recommended. Anchor bolts are 3/4" diameter, SAE J429 Grade 5 or equivalent.	
Seismic Load Rating		
Design Spectral Acceleration (g) for Component Importance Factor, $I_p = 1.0$:	$S_{DS} = 2.64$	on grade ($z/h = 0.0$), rigid mount
	$S_{DS} = 0.88$	on rooftop ($z/h = 1.0$), rigid mount
	$S_{DS} = 0.59$	on rooftop ($z/h = 1.0$), spring-isolation mount
Conditions:	The unit is installed outside and not within an occupied space.	
	The unit is supported and anchored as recommended. Anchor bolts are 3/4" diameter, SAE J429 Grade 5 or equivalent.	
	All piping provided by others is supported and restrained independently of the unit.	

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DRAWING NUMBER:
IC-90609-100

**SECTION 236500
COOLING TOWERS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Open circuit, induced draft, crossflow cooling towers.

1.02 REFERENCE STANDARDS

- A. ASHRAE 90.1-2019 – Energy Standard for Buildings Except Low-Rise Residential Buildings.
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products 2017.
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2018.
- D. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus 2018.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2018b.
- F. ASTM D2794 - Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- G. ABMA STD 9 - Load Ratings and Fatigue Life for Ball Bearings 2015.
- H. ABMA STD 11 - Load Ratings and Fatigue Life for Roller Bearings 2014.
- I. CTI STD-201 OM - Operations Manual for Thermal Performance Certification of Evaporative Heat Rejection Equipment 2017.
- J. CTI STD-201 RS - Performance Rating of Evaporative Heat Rejection Equipment 2017.
- K. CTI STD-111 - Gear Speed Reducers for Application on Industrial Water Cooling Towers; 2009. (Only for gear-driven products)
- L. ISO 9001 - Quality management systems -- Requirements 2015.
- M. NEMA MG 1 - Motors and Generators 2017.
- N. ASCE/SEI 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

1.03 SUBMITTALS

- A. Product Data: Provide rated capacities, dimensions, weights and point loadings, accessories, required clearances, electrical requirements and wiring diagrams, and location and size of field connections.
- B. Shop Drawings: Indicate suggested structural steel supports including dimensions, sizes, and locations for mounting bolt holes.
- C. Manufacturer's Certificate: Certify that cooling tower performance, based on CTI STD-201 meets or exceeds specified requirements and submit performance curve plotting leaving water temperature against wet bulb temperature.
- D. Manufacturer's Instructions: Submit manufacturer's complete installation instructions.
- E. Operation and Maintenance Data: Include start-up instructions, maintenance data, controls, and accessories.
- F. Warranty: Submit manufacturer's warranty and ensure forms have been filled out in Owner's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum 20 years of documented experience and ISO 9001 certification.
- B. Installer Qualifications: Company specializing in performing the type of work specified in this section with minimum 20 years of experience and approved by manufacturer.
- C. Product Performance:
 - 1. Cooling tower must have a minimum energy rating of [_____] per ASHRAE 90.1, 189 and CA Title 24.
 - 2. Structural and Seismic Performance: The structure will be designed, tested and certified in accordance with IBC regulations to meet a minimum unrestricted seismic design SDS = ____ g with an Importance Factor of ____ and wind load of ____ psf. Units not provided with a certificate of IBC compliance will not be an acceptable alternative.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Equipment will be factory-assembled, including a cold water basin, heat transfer section, water distribution, fan drive system, and casing panels. For shipping, disassemble into as large as practical sub-assemblies to minimize field work for re-assembly.
- B. Comply with manufacturer's installation instructions for rigging, unloading, and transporting units.

1.06 WARRANTY

- A. One-year warranty after start-up, or eighteen months from date of shipment, whichever occurs first. Warranty to include coverage for defects in material and workmanship.
- B. Fans, fan shafts, bearings, sheaves, gearboxes, drive shafts, couplings, and mechanical equipment support must be warranted against defects in materials and workmanship for a period of five (5) years or seven (7) years, if motor space heater is properly wired.
- C. For direct drive fan system: Fans, fan shafts, bearings, sheaves, gearboxes, drive shafts, couplings, and mechanical equipment support must be warranted against defects in materials and workmanship for a period of seven (7) from date of shipment. Included VFD will have 5-year warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Open Circuit, Induced Draft, Crossflow Cooling Towers:
 - 1. Basis of Design: Baltimore Aircoil Company; Series 3000: www.baltimoreaircoil.com #BAC

2.02 MANUFACTURED UNITS

- A. Provide units suited for outdoor use, factory-assembled, induced draft with vertical discharge of air, and fan assemblies built into casing.
----- ALTERNATE for Knockdown Shipping -----
- B. Provide units suited for outdoor use, induced draft with vertical discharge of air. Units will be shipped disassembled in protective crates. Crates and components must be clearly labeled with part numbers. Assembly of units will be completed onsite. Cold water basins will not have welded seams when shipped knocked down.

2.03 COMPONENTS

A. Cold Water Basin:

1. Constructed with a minimum of 14-gauge galvanized steel with access doors at both ends of tower to air plenum. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Provide sloped basin with drain/clean-out connection.
----- ALTERNATE for TriArmor Basin -----
2. Tri-layer protection system consisting of G-235 galvanized steel, a thermosetting hybrid polymer, and a polyurethane liner factory applied to all submerged surfaces. A Removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. A welded Type 316 stainless steel basin is an acceptable alternative.
----- ALTERNATE for 304 Stainless Steel -----
3. Type 304 welded stainless steel panels and structural members. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. Basins with bolted seams or constructed of 301 stainless steel are not acceptable.
----- ALTERNATE for 316 Stainless Steel-----
4. Type 316 welded stainless steel panels and structural members. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. Basins with bolted seams or constructed of 301 stainless steel are not acceptable.
-----ALTERNATE for Basinless Unit-----
5. The unit will be provided without an integral cold water basin. The unit will be mounted on a separate concrete cold water basin provided by others, to allow cooling water to pass directly from the fill into the basin.
6. (Optional) Flume Box: Unit will be equalized with adjacent cell(s) through a factory-supplied flume box connection built into the cold water basin. Hardware, gaskets, and flume will be supplied. Size will be appropriate for the design flowrate of the tower.
7. (Optional) Equalizer Connection: An equalizer connection will be built into the cold water basin on the [bottom, side] with a pipe diameter appropriate for the design flowrate of the tower. See drawings for connection type.
8. (Optional) Bypass Connection: A bypass connection will be built into the cold water basin on the [bottom, side] with a pipe diameter appropriate for the design flowrate of the tower. See drawings for connection type.

B. Water Distribution System

1. The hot water distribution basins will be gravity-fed and accessible from the outside of the unit for service or inspection while unit is in operation. Included weir dams will accommodate a flow range of 50% to 100% of the design flow rate. Lift-off distribution covers will be constructed of steel and designed to withstand a 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load.

----- ALTERNATE for EVERTOUGH Construction-----

2. The hot water distribution basins will be gravity-fed and accessible from the outside of the unit for service or inspection while unit is in operation. Basins must be constructed of corrosion-resistant pultruded fiberglass reinforced polyester (PFRP) or type 316 stainless steel. Included weir dams will accommodate a flow range of 50% to 100% of the design flow rate. Lift-off distribution covers will be constructed of Type 304 stainless steel and designed to withstand a 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load.

C. Casing Panels and Framework:

1. Casing panels will be constructed of corrosion and UV-resistant fiberglass-reinforced polyester (FRP) or Type 304 stainless steel to minimize maintenance requirements and prolong equipment life.

----- ALTERNATE for Thermosetting Hybrid Polymer Panels-----

2. Casing panels will be constructed of galvanized steel protected by a thermosetting hybrid polymer. The polymer to consist of galvanized steel prepared in a four-step (clean, pre-treat, rinse, and dry) process with an electrostatically applied, thermosetting, hybrid polymer fuse-bonded to the substrate during a thermally activated curing stage and monitored by a 23-step quality assurance program. Other coatings must be submitted to the engineer for pre-approval. Approved equals must have undergone testing, resulting in the following results as a minimum:
 - a. When X-scribed to the steel substrate, unit to withstand 6000 hours of 5 percent salt spray per ASTM B117 without blistering, chipping, or loss of adhesion.
 - b. When X-scribed to the steel substrate, unit to withstand 6000 hours of exposure to acidic (pH=4.0) and alkaline (pH=11.0) water solutions at 95 degrees F (35 degrees C) without signs of chemical attack.
 - c. Unit to withstand impact of 160 in-lbs per ASTM D2794 without fracture or delamination of the polymer layer.
 - d. Unit to withstand 6000 hours of ultraviolet radiation equivalent to 120,000 hours of noontime sun exposure without loss of functional properties.
 - e. Unit to withstand 200 thermal shock cycles between minus 25 degrees F and 180 degrees F (minus 32 degrees C and 82 degrees C) without loss of adhesion or other deterioration.
 - f. Unit to withstand 6000 hours of exposure to 60 psi (42,184 kg/m²) water jet without signs of wear or erosion.
 - g. Type 304 stainless steel may be supplied as an equal to eliminate the need for passivation, minimize maintenance requirements, and prolong equipment life.

----- ALTERNATE for Galvanized Steel Panels-----

3. Casing panels and framework will be constructed of G235 galvanized steel.

----- ALTERNATE for 304 Stainless Steel Panels-----

4. Casing panels, framework, and fasteners will be constructed of Type 304 stainless steel. Type 301 stainless steel is not an acceptable alternative.

----- ALTERNATE for 316 Stainless Steel Panels-----

5. Casing panels, framework, and fasteners will be constructed of Type 316 stainless steel. Type 301 or 304 stainless steel are not an acceptable alternative.

D. Air Inlet Louvers

1. Fiberglass Reinforced Polyester (FRP): Air Inlet louvers will be separate from the fill and removable to provide easy access for inspection of the air/water interface at the louver face. Louvers will prevent water splash out during fan cycling and be constructed of maintenance free, corrosion and UV resistant FRP.

----- ALTERNATE for Steel Louvers-----

2. Steel Louvers: Air inlet louvers will be separate from the fill and removable to provide easy access for inspection of the air/water interface at the louver face. Louvers will prevent water splash out during fan cycling. Material of construction must match steel grade of casing panels.

----- ALTERNATE for Combined Inlet Shields (PVC)----

3. PVC Inlet Shields: Louver sections will be individually removable sections. The combined inlet shields will be UV resistant PVC, installed on the air inlet face to minimize air resistance, prevent water splash out, and minimize sunlight exposure to reduce the potential for algae growth in the cold water basin.

4. (Optional) Air Intake Screens:

- a. A removable galvanized steel wire mesh screen with 1"x1" openings will cover air intake areas.

----- ALTERNATE for Stainless Steel Screens----

- b. A removable stainless steel wire mesh screen with 1"x1" openings will cover air intake areas.

- E. Fans: Multi blade, axial type. Fans must factory test-mounted, balanced, and aligned to ensure reliable operation and ease of maintenance. Fan type will be selected to meet sound ratings published on equipment schedule.

F. Motors:

1. Single speed (1800 rpm) premium efficiency, cooling tower duty motor mounted on adjustable steel base. Fan motors will be inverter duty type designed per NEMA Standard MG1, Section IV Part 31. Motors will include an internal space heater that can be wired to remove condensation when motor is not in use.

----- ALTERNATE ENDURADRIVE Fan System -----

2. Direct Drive Motor: See Direct Drive Fan System (2.03 G)

G. Fan Drive System:

1. Direct Drive Fan System: The motor will be directly connected to the fan shaft within the airstream, eliminating the need for couplings, right-angle gears, belts, or sheaves.

- a. Quality Assurance

- 1) Tower thermal performance must be certified per CTI STD-201.
- 2) Manufactured under ISO 9001 approved quality assurance program.
- 3) Seismic shake table tested per ICC-ES A156; must meet local Sds requirement but cannot be less than 0.50.
- 4) Tested and certified to operate continuously at 104°F ambient wet bulb temperature.
- 5) Compatible VFD supplied by tower manufacturer; see VFD specification for details.

- b. (OPTIONAL) Factory Test: The motor will be wired and tested prior to shipping. Testing done on-site is not acceptable. Testing will include:
 - (a) Installation of unit on a test stand for a visual/audible inspection to confirm no excess movement or unusual noises exist.
 - (b) Wiring of motor to a VFD.
 - (c) Running the motor to a specified speed/frequency and taking measurements of power draw to ensure appropriate loading is being achieved.
 - (d) Documentation of testing results supplied in the customer's documents.
- c. General
 - 1) CSA Label and CE mark for safety compliance.
 - 2) Totally Enclosed Air Over (TEAO) IP56 rating.
 - 3) Interior permanent magnet rotor construction; synchronous design; magnets enclosed inside the rotor lamination; magnets with high temperature grade capable of 200°C conditions without loss of magnetization.
 - 4) Compliance with NEMA MG 1 part 31 standards for definite-purpose inverter-fed motors suitable for 2000 volt peak at 10,000 volt per microsecond.
- d. Components
 - 1) Bearing isolator (seal) on motor shaft provided with shaft grounding device, utilizing two carbon grounding brushes to eliminate bearing currents.
 - 2) Salient pole permanent magnet design rotor resulting in no I²R losses.
 - 3) Stator consisting of low-loss C5a coated electrical steel.
 - 4) Integral stator cooling fins, not a shaft mounted fan, for controlling rotor and stator temperatures during operation.
 - 5) Class H insulation system rated at 1850 Volts peak, and thermally-rated wire when tested per ASTM D-2307 for 600,000 hours extrapolated life at 155°C minimum.
 - 6) Shaft sealed by three O-rings, with two conductive O-rings to properly ground the bearing, eliminating damaging currents in the bearings.
 - 7) Oversized conduit box with provisions for grounding inside.
 - 8) Integral condensate drain system.
 - 9) Three normally closed thermostats, one per phase.
 - 10) Open ball bearings with a minimum L10 life of 100,000 hours.
 - 11) Bearings sized to handle unbalanced loads based on an ISO Balance Grade of 6.3.
 - 12) Re-greaseable bearing system including stainless steel inlet fitting and grease drain provided with square stainless-steel square head pipe plugs.
 - 13) E-coat primer on cast iron parts prior to application of top coat.
 - 14) Enhanced cooling tower duty paint that withstands 1000 hour salt fog test.

----- ALTERNATE Belt Drive -----

2. Belt Drive: Designed for minimum 150 percent motor nameplate power. Fan and motor sheave(s) will be fabricated from corrosion-resistant materials to minimize maintenance and ensure maximum drive and powerband operating life. Bearings must have a minimum L-10 life of 80,000 hours per ABMA STD 11. Belt tension must be easily adjusted in the field.

(Optional) Extended Grease Fittings: Extended grease lines are supplied that reach from the bearing to fittings on the exterior casing near the access doors. This facilitates easy periodic bearing maintenance without entering the tower.

----- ALTERNATE for BALTIGUARD™ Fan System-----

3. Two single speed fan motors, one sized for full speed and load, the other sized for 2/3 speed, and approximately 1/3 the full load horsepower, will be provided for capacity control and stand-by protection from drive or motor failure. Two-speed motor(s) are not an acceptable alternative. Fan and motor sheave(s) will be fabricated from corrosion-resistant materials to minimize maintenance and ensure maximum drive and powerband operating life. Bearings must have a minimum L-10 life of 80,000 hours per ABMA STD 11. Belt tension must be easily adjusted in the field.

----- ALTERNATE Internal Gear Drive -----

4. Gear Drive with Internal Motor: Industrial duty, right angle gear designed in accordance with CTI STD-111. Gear must be rated for service factor of 2.0 with forward and reverse operation. Oil level fill port and sight glass are located on the gear. Gear connected to motor by flexible coupling.

----- ALTERNATE External Gear Drive -----

5. Gear Drive with External Motor: Industrial duty, right angle gear designed in accordance with CTI STD-111. Gear must be rated for service factor of 2.0 with forward and reverse operation. Oil level fill port and sight glass are located on the gear. Gear connected to motor with a drive shaft.

H. Fan Guard:

1. Welded steel rod and wire guard, hot dipped galvanized after fabrication. Installed over fan discharge.

-----ALTERNATE for stainless steel fan guard-----

2. Welded stainless steel rod and wire guard, placed over fan discharge.

- I. (Optional) Motor Removal Davit: The unit will be equipped with a mechanical equipment removal davit. The motor will lower from the mechanical equipment supports down to grade. Davit will attach to the unit without the need for tools. If tools are required for davit installation or removal, provide (1) davit for each motor provided.

- J. Gravity-fed Distribution: Hot water basins will have removable covers for inspection while unit is in operation, weir dams and metering nozzles for at least 50 percent turndown capability. Gravity flow nozzles will be snap-in type for easy removal. Pressurized nozzles are not acceptable.

- K. (Optional) Balancing Valves: Heavy-duty butterfly valves will be provided at the hot water inlet connections. These valves will include cast iron bodies, elastomer seat and steel operating lever.

-----Optional EASY CONNECT Single Inlet-----

- L. Single Inlet Connection: Each tower cell will be furnished with a single water inlet connection complete with the means to automatically balance flow rates to the hot water basins.

(Optional Drain Valve on EASY CONNECT): The factory-supplied internal piping will include a manual drain valve positioned to drain the piping during shutdown to reduce risk of freezing.

- M. Fill:

1. The fill and integral drift eliminators will be formed from self-extinguishing (per ASTM-568) polyvinyl chloride (PVC) having a flame spread rating of 5 per ASTM E84 and will be impervious to rot, decay, fungus and biological attack. The fill is suitable for entering water temperatures up to and including 130°F (54.4°C). The fill must be manufactured, tested and rated by the cooling tower manufacturer and are elevated above the cold water basin floor to facilitate cleaning. If louvers are attached to fill, a spare set of fill sheets are required in case of icing and scaling damage.

----ALTERNATE for High-Temp Fill----

2. The fill and integral drift eliminators will be formed from self-extinguishing (per ASTM-568) chlorinated polyvinyl chloride (CPVC) having a flame spread rating of 5 per ASTM E84 and will be impervious to rot, decay, fungus and biological attack. The fill is suitable for entering water temperatures up to and including 140°F (60.0°C). The fill must be manufactured, tested and rated by the cooling tower manufacturer and are elevated above the cold water basin floor to facilitate cleaning. If louvers are attached to fill, a spare set of fill sheets are required in case of premature icing and scaling.

- N. Drift Eliminators: Three-pass design made of PVC material. Primary eliminators will be integrated into the fill media.

- O. Basin Water Level Control:

1. Corrosion resistant PVC make-up valve with plastic float for easy adjustment of operating water level.

----- ALTERNATE for Electric Water Level Controller-----

2. Electric water level control with NEMA 4 enclosure, solid state controls, LED status light, and stainless steel water level sensing electrodes. Number and position of probes provided to sense the following: high water level, low water level, high water alarm level, low water alarm level, heater safety cutout, and automatic solenoid valve. Include all necessary mounting hardware.

2.04 ACCESSORIES

- A. (Optional) Electric Immersion Heaters: In pan suitable to maintain temperature of water in pan at 40 degrees F (4.4 degrees C) when outside temperature is 0 degrees F (-17.7 degrees C) [OR -20 degrees F (-28.9 degrees C)] and wind velocity is 15 mph (25 kph); immersion thermostat and float control operate heaters on low temperature when the pan is filled. Heaters will be constructed of copper.
- B. (Optional) Basin Sweeper Piping: The cold water basin of the cooling tower will be equipped with PVC sump sweeper piping with plastic eductor nozzles. The piping must be designed specifically for the size and shape of the basin to ensure full agitation.
- C. (Optional) Fan Cylinder Extension: To extend the height of the tower equal to the surrounding enclosure, the cooling tower will be provided with _____ inches (mm) of fan cylinder extension. The fan cylinder extension will match the construction of the fan deck.

D. (Optional) Vibration Switch

1. Provide a mechanical local reset vibration switch. The mechanical vibration cutout switch will be guaranteed to trip at a point so as not to cause damage to the cooling tower. To ensure this, the trip point will be set in a frequency range of 0 to 3,600 RPM and a trip point of 0.2 to 2.0 g's.
2. (ALTERNATE) Provide an electronic remote reset vibration switch with contact for BAS monitoring. Wiring will be by the installing contractor. The electronic vibration cutout switch will be set to trip at a point so as not to cause damage to the cooling tower. To ensure this, the trip point will be set in a frequency range of 2 to 1000 Hertz and a trip point of 0.45 in/sec (0.0114 m/sec).

E. Access Packages: See submittal documents for access package requirements. Platforms and ladders must ship assembled from cooling tower manufacturer.

1. Plenum Access: Two hinged access doors must be provided for access into the plenum section. Include an internal walkway for inspection and maintenance. All working surfaces will be able to withstand 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load. Other components of the cooling tower, i.e. basin and fill/drift eliminators, will not be considered an internal working surface. Cooling tower designs that utilize these surfaces as working platforms will not be acceptable. Cooling tower manufacturers that promote these surfaces to be used as a working platform will provide a two-year extended warranty to the Owner to repair any damage to these surfaces caused during routine maintenance.
2. (Optional) Fan Deck Ladder with Handrails: A ladder with steel safety cage and safety gate will be provided for access to the fan deck. Access door or service platforms are not acceptable. 1-1/4 inch (32 mm) galvanized steel pipe handrail will be provided around the perimeter of the cooling tower cells. The handrails will be provided with knee and toe rails and will conform to OSHA requirements applicable at the time of shipment. To comply with OSHA 1910.28(b)(9), fan deck ladders exceeding 24' in total length must be designed to accept a ladder safety system. A ladder safety cage is not an acceptable alternative to a ladder safety system and will not be provided on ladders exceeding 24' in total length.
3. (Optional) Louver Face External Platforms: Easy access to the hot water basins for inspection of spray water distribution, even during tower operation, will be provided by external platforms at the louver face. Fan deck ladders and handrails, which add to the overall height of the tower, are not acceptable. Platforms and ladders must ship assembled from cooling tower manufacturer. To comply with OSHA 1910.28(b)(9), louver face external platform ladders exceeding 24' in total length must be designed to accept a ladder safety system. A ladder safety cage is not an acceptable alternative to a ladder safety system and will not be provided on ladders exceeding 24' in total length.
4. (Optional. Available on Double Height Models) Internal Service Platform: An internal platform will be provided in the plenum section to provide for inspection and maintenance of internal components and drive system. All working surfaces will be able to withstand 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load. Platforms and ladders must ship assembled from cooling tower manufacturer.
5. (Optional) Access Door Platform: An external galvanized steel access platform at the access door of the unit(s) provides access to the spray distribution system or internal plenum. An aluminum ladder and 1-1/4 inch (32 mm) galvanized steel pipe safety railing is included with the platform. This option meets pertinent OSHA standards. Platforms and ladders must ship assembled from cooling tower manufacturer.

6. (Optional) Safety Gates: All handrail access openings will be provided with a self-closing safety gate for increased safety.
- F. (Optional) Sound Attenuation:
1. Discharge Sound Attenuation: The unit will be equipped with straight discharge attenuation with sound absorbing fiberglass acoustical baffles to reduce sound levels from the top of the unit.
 2. Intake Sound Attenuation: The unit will be equipped with attenuation at the unit's air intake. Sound absorbing fiberglass acoustical baffles will reduce sound levels from the air intake side of the unit.
- G. (Optional) Velocity Recovery Stacks: A conical shaped fan cowl extension will be provided that allows for increased cooling tower performance. Increase in thermal performance must be certified per CTI STD 201. VR stack material of construction will match unit.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Provide the services of the manufacturer's field representative to supervise rigging, hoisting, and installation, allowing for minimum of one eight-hour day per tower.
- C. Install tower on structural steel beams as instructed by manufacturer.
- D. Connect condenser water piping to tower. Pitch condenser water supply to tower and condenser water suction away from tower.
- E. Connect make-up water piping to tower. Pitch to tower.
- F. Connect overflow and drain to acceptable discharge point as required by jurisdiction.

3.02 FIELD QUALITY CONTROL

- A. See Section Quality Requirements, for additional requirements.
- B. Provide the services of the manufacturer's field representative to inspect tower after installation and submit report prior to start-up, verifying installation is in accordance with specifications and manufacturer's recommendations.

3.03 SYSTEM START-UP

- A. Start-up tower in presence of and instruct Owner's operating personnel.

3.04 SCHEDULES

- A. Cooling Towers
 1. Drawing Code:
 2. Location:
 3. Manufacturer:
 4. Model Number:
 5. Cooling Capacity
 - a. Water Flow Rate:
 - b. Entering Water Temperature:
 - c. Leaving Water Temperature:
 6. Entering Air WB Temperature:
 7. Number of Fan Motors:

8. Motor Size: [] HP
9. Motor Electrical Characteristics: [] Volts, Three-Phase, 60 Hz.
10. Basin Heaters No. and Type:

END OF SECTION

JOB NUMBER: 17024
ALBERT SHUB
PE# 0043414 M.E.
EB0003862
FLORIDA ENGINEERING SERVICES
MECHANICAL AND ELECTRICAL
ENGINEERS

FES

34 N.W. 168TH STREET
NORTH MIAMI BEACH, FL 33169
TELEPHONE: (305) 653-0212
FAX: (305) 653-0232
e-mail: AlbertS@fesinc.biz

FES, INC.

Academic Village Cooling Tower Replacement Level 1 Alteration per FBC 2023 Existing Buildings

Pembroke Pines, Florida 33025

City of Pembroke Pines
Public Services Dep.

[illegible]

DESIGN
DELIVERABLE: SITE PLAN
ISSUE DATE:05-30-2017

PROJECT NUMBER 25017
DRAWN BY:
CHECKED BY:

SHEET TITLE

DEMOLITION PLAN

SHEET TITLE

M-1

ADDITIONAL COMPLIANCE NOTES:

1. THESE ENGINEERING DOCUMENTS AND THE RESULTING INSTALLATION OF THE
DEPICTED HVAC SYSTEMS FOR THIS PROJECT ARE INTENDED TO CONFORM TO THE
FOLLOWING CODES AND STANDARDS:

- FLORIDA BUILDING CODE 8TH EDITION (2023)
- FLORIDA BUILDING CODE EXISTING BUILDINGS 8TH EDITION (2023)
- FLORIDA BUILDING CODE MECHANICAL 8TH EDITION (2023)
- FLORIDA ENERGY CONSERVATION CODE 8TH EDITION (2023)
- FLORIDA FIRE PREVENTION CODE 8TH EDITION (2023)
- ASHRAE 2009 FUNDAMENTALS HANDBOOK
- MSS SP-69-2002 PIPE HANGERS AND SUPPORTS - SELECTION AND APPLICATION
- NFPA 214 - STANDARD ON COOLING TOWERS
- NFPA 101 - LIFE SAFETY CODE

IF WORK AS LAID OUT, INDICATED OR SPECIFIED IS CONTRARY TO OR CONFLICTS WITH THE LISTED CODES AND STANDARDS, THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING A BID. THE ARCHITECT/ENGINEER WILL THEN ISSUE INSTRUCTIONS AS HOW TO PROCEED.

2. ALL EQUIPMENT IS TO BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS, SPECIFICATIONS, AND RECOMMENDATIONS FOR SAFE AND EFFICIENT OPERATIONS. ALL MANUFACTURER OPERATION AND MAINTENANCE GUIDES SHALL BE ISSUED TO THE BUILDING OPERATOR AFTER SUCCESSFUL COMPLETION OF MAINTENANCE AND/OR PREVENTATIVE MAINTENANCE PROCEDURES TRAINING OF THE BUILDING OPERATORS.

3. DESIGN CRITERIA INCLUDES BUT NOT LIMITED TO:

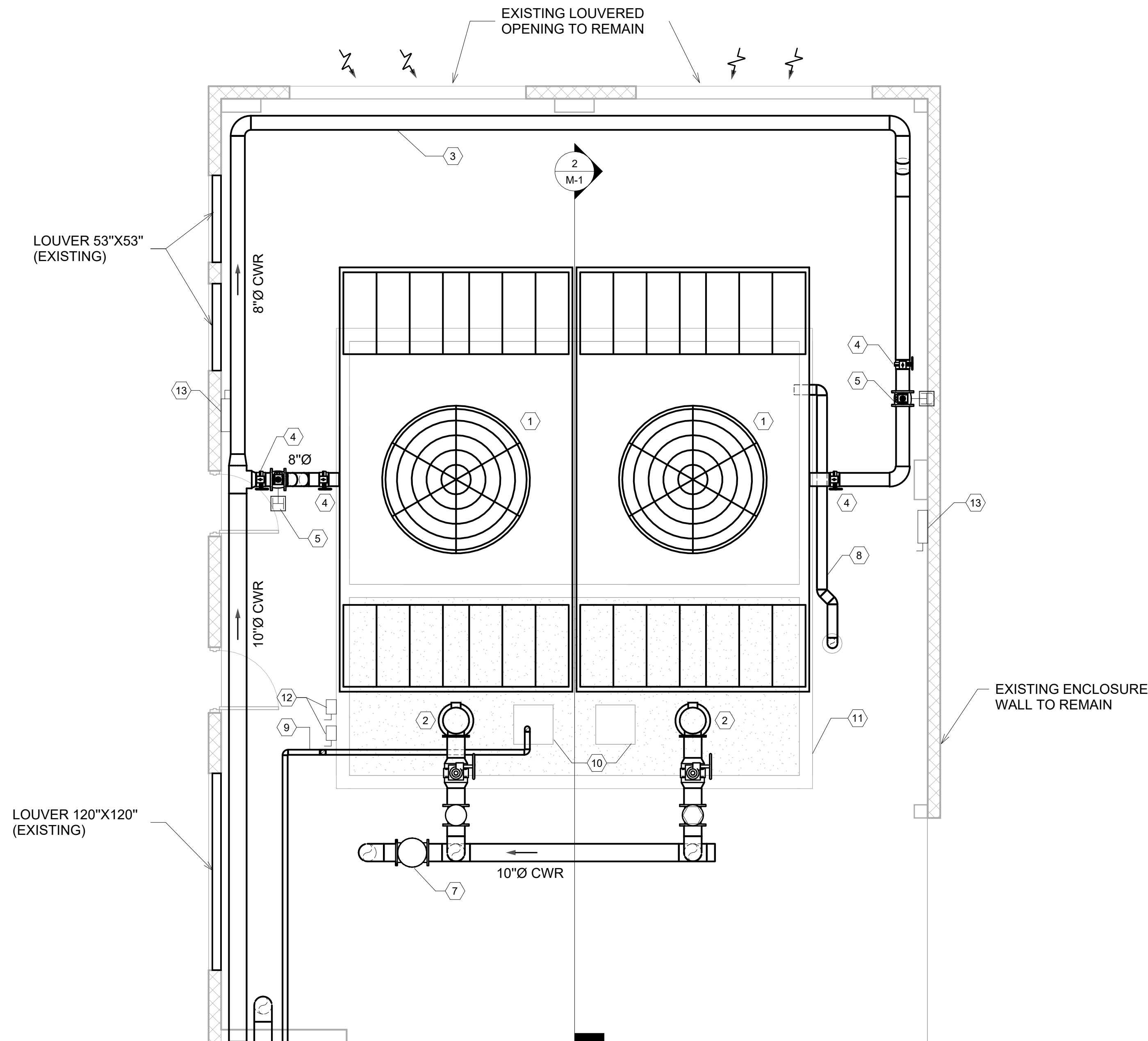
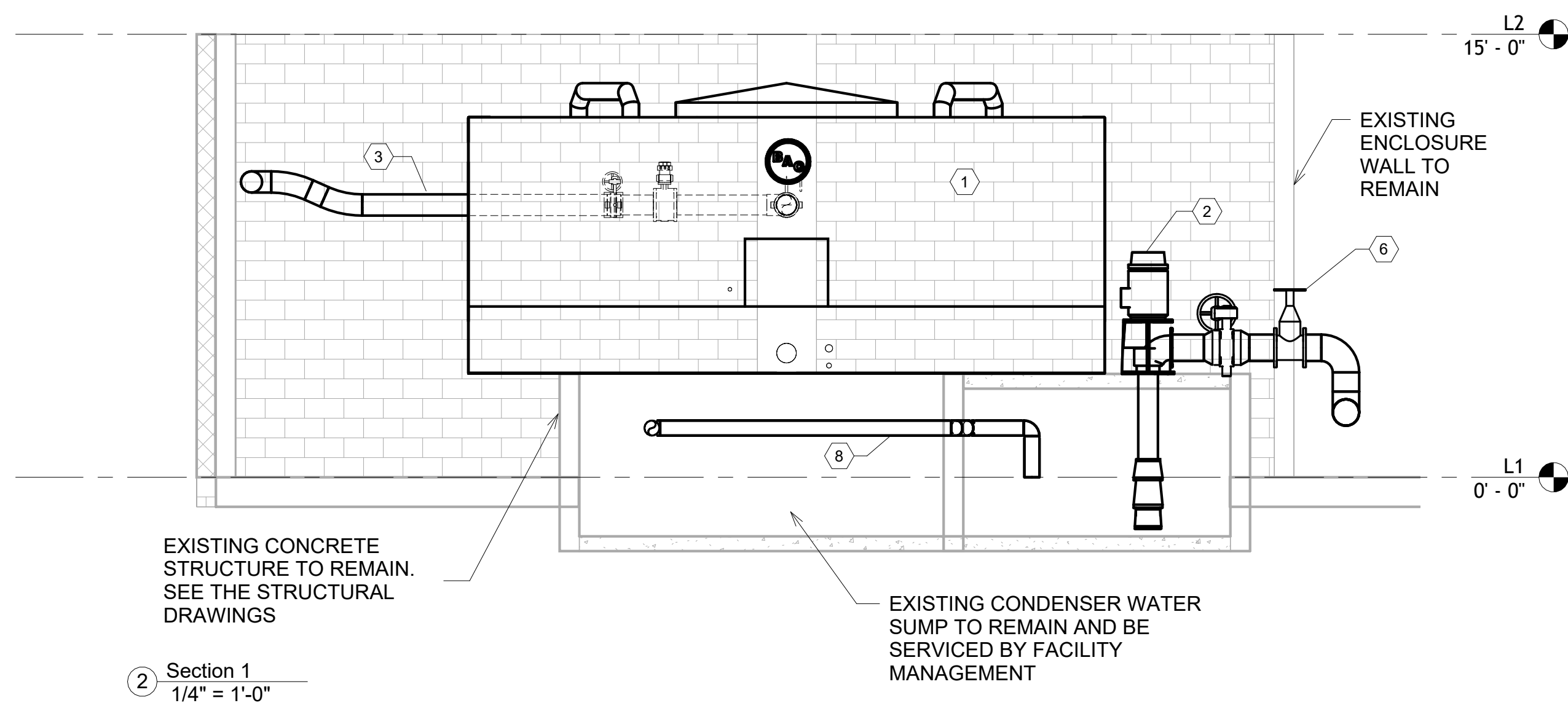
- CLIMATIC DESIGN CONDITIONS - 80°F EVAPORATION DESIGN PARAMETER FOR SUMMER (MIAMI, FL)

DEMOLITION NOTES	
	EXISTING COOLING TOWER, BAC SERIES 3000 MODEL: 33458-2WS COOLING TOWER TO BE DISCONNECTED FROM EXISTING PIPING, WIRING AND LEGALLY DISPOSED. EXISTING FAN MOTORS SHALL BE REMOVED AND RETURNED TO FACILITY MANAGEMENT.
1	
2	EXISTING SUBMERSIBLE / VERTICAL CONDENSER WATER PUMPS TO REMAIN.
3	EXISTING 8"/10" DIA. CWR PIPING TO REMAIN.
4	EXISTING SHUT OFF VALVE TO REMAIN.
5	EXISTING MOTORIZED VALVE TO REMAIN.
6	EXISTING 8"/10" DIA. CWS PIPING AND ACCESSORIES TO REMAIN.
7	EXISTING 10" STRAINER TO REMAIN AND BE SERVICED.
8	EXISTING 6" DIA. SUMP OVER FLOW PIPING DISCHARGING INTO 8" HUB DRAIN TO REMAIN.
9	EXISTING 1-1/2" DOMESTIC WATER MAKE UP TO REMAIN.
10	EXISTING SUMP ACCESS PANELS TO REMAIN.
11	EXISTING CONCRETE SUPPORT WALLS / STRUCTURE TO REMAIN. SEE STRUCTURAL DRAWINGS.
12	EXISTING CONDENSER WATER PUMP DISCONNECT SWITCHES AND STARTERS TO REMAIN.
13	EXISTING COOLING TOWER DISCONNECT SWITCHES TO REMAIN.
NOTES: 1- EXISTING COOLING TOWER MOTORS ARE CONTROLLED VIA. 2- EXISTING VARIABLES FREQUENCY DRIVES AND TRANE BMS ALL LOCATED IN ADJACENT CHILLER PLANT.	


NOTES:
1- EXISTING COOLING TOWER MOTORS ARE CONTROLLED VIA.
2- EXISTING VARIABLES FREQUENCY DRIVES AND TRANE BMS ALL LOCATED IN ADJACENT CHILLER PLANT.

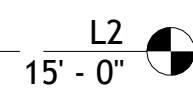
Demolition Scope Summary

- A. Coordinate timing and logistics with the Facility Management the time frame and schedule available for system shut down.
- B. Disconnect all existing electrical wiring serving cooling tower motors.
- C. Remove the cooling tower fan motors and return these to the facility manager.
- D. Remove existing cooling towers and leave the space open and ready to accept the new equipment. Contractor is responsible for all necessary crane service, rigging, transport of towers to disposal site, and disposal fees.

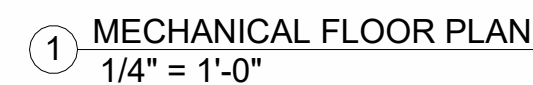
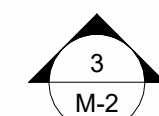


① DEMOLITION PLAN
1/4" = 1'-0"

A circular professional engineer seal for Albert S. Shub. The outer ring contains the text "ALBERT S. SHUB" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE" at the top, "No. 43414" in the center, and "STATE OF FLORIDA" at the bottom, also separated by two stars.



③ Section 2
1/4" = 1'-0"

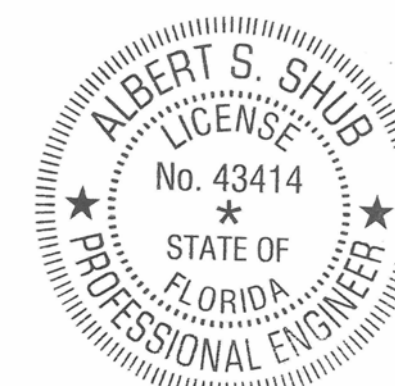


COOLING TOWER SCHEDULE	
OWER NUMBER	CT-1 & CT-2
CAPACITY (MBH) TOTAL	12,245.10
FLOW RATE (gpm) TOTAL	1,750.00
EWT/LWT (°F)	99/85
DESIGN WB TEMP (°F)	80
FAN MOTOR HP	2 @ 25 EA
FAN MOTOR SPEED (rpm)	1800
TOWER FAN SPEED (rpm)	--
MOTOR VOLTAGE	460-3-60
MANUFACTURER	BAC
MODEL	S3E-1222-00N-2S
DRIVE TYPE	BELT
OPERATING WEIGHT (lbs)	23,799
LOCATION	GROUND
1. INDUCED DRAFT CROSSFLOW COOLING TOWER WITH CT1 CERTIFIED STD-201 PERFORMANCE AND FULLY WIND-LOADED CONSTRUCTION TO WITHSTAND (138 PSF HORIZONTAL/109 PSF VERTICAL) HURRICANE FORCE WINDS, SIGNED AND SEALED ENGINEERED CALCULATIONS FROM THE MANUFACTURER REQUIRED. COOLING TOWER AND INSTALLATION TO COMPLY WITH FBC-2020 MECHANICAL SECTION 908.1 AND 908.4 2. COOLING TOWERS TO BE OF 304L STAINLESS STEEL CONSTRUCTION AND HARDWARE INCLUDING DISTRIBUTION AND COLLECTION BASINS 3. INTERIOR PLENUM WALKWAY 4. PREMIUM EFFICIENCY, DRIVE DUTY MOTORS WITH SHAFT GROUNDING RINGS 5. 1 YEAR PARTS AND LABOR BASE WARRANTY PLUS AN EXTENDED 4-YEAR FACTORY PARTS AND CONTRACTOR LABOR WARRANTY IS REQUIRED 6. VIBRATION DETECTION SWITCH FOR EACH TOWER METRIX 5550. 7. 80 cfm MAX SOUND RATING AT 5ft FROM AIR INLET FACE. 8. FACTORY ASSISTED START-UP. 9. FM CERTIFICATION TO ALLOW OPERATION WITHOUT DEDICATED FIRE PROTECTION SYSTEM. 10. 5ft LADDER EXTENSIONS.	

(X)	DRAWING NOTES
1	NEW CT-1, CT-2 MOUNTED ON EXISTING CONCRETE WALL STRUCTURE. SEE CT SCHEDULE ON M SHEET FOR STRUCTURAL DRAWINGS FOR TIE-DOWN INFORMATION. FINAL POSITION OF COOLING TOWER MUST ALIGN WITH EXISTING CWS/R PIPING TERMINATION.
2	EXISTING SHUT-OFF VALVE.
3	EXISTING AUTO-FLOW CONTROL VALVE.

New installation scope summary

- 1- Install new cooling towers as specified. Set cooling tower on existing structure such that all piping connections line up with existing piping. Rearranging existing piping is not part of the scope of work.
- 2- Tie down cooling towers as specified in structural drawings.
- 3- Connect new cooling tower motors to existing disconnect switches. The variable frequency drives that control the motors are existing and located within the chiller water plant. Contractor to replace as necessary the sump water temperature sensor and wiring for proper system operation. All operating set point to remain as they are.
- 4- Start up new cooling towers. Verify proper operation.



Academic Village Cooling Tower Replacement Level 1 Alteration per FBC 2023 Existing Buildings

Pembroke Pines, Florida 33025

City of Pembroke Pines
Public Services Dep.[illegible]

DESIGN
DELIVERABLE: SITE PLAN
ISSUE DATE:05-30-2017

PROJECT NUMBER 25017
DRAWN BY:
CHECKED BY:

SHEET TITLE

MECHANICAL
FLOOR PLAN

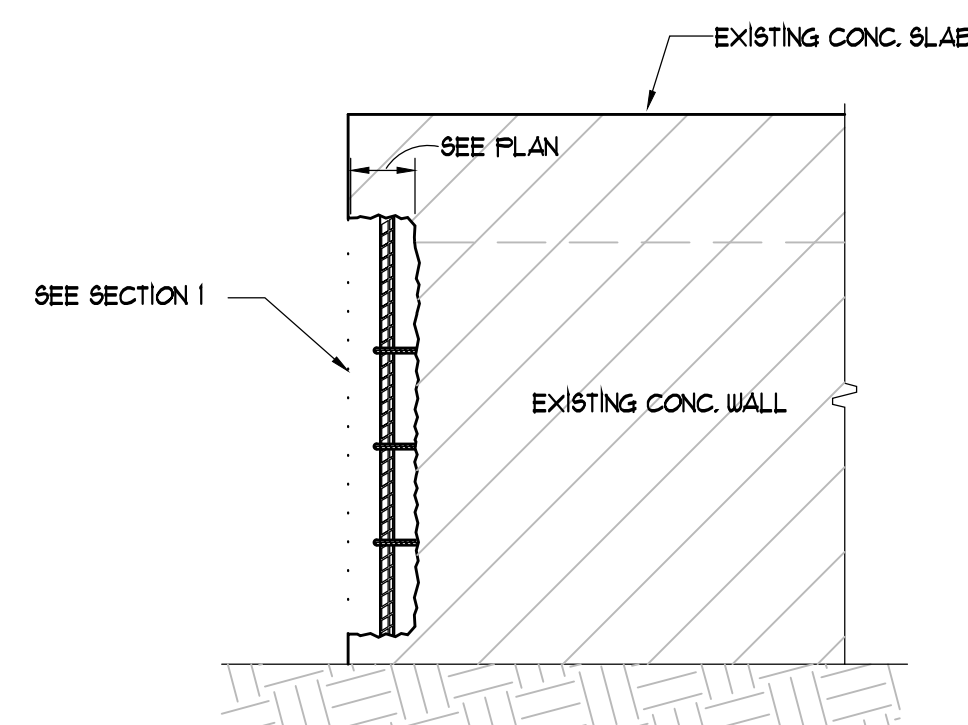
SHEET TITLE:

M-2

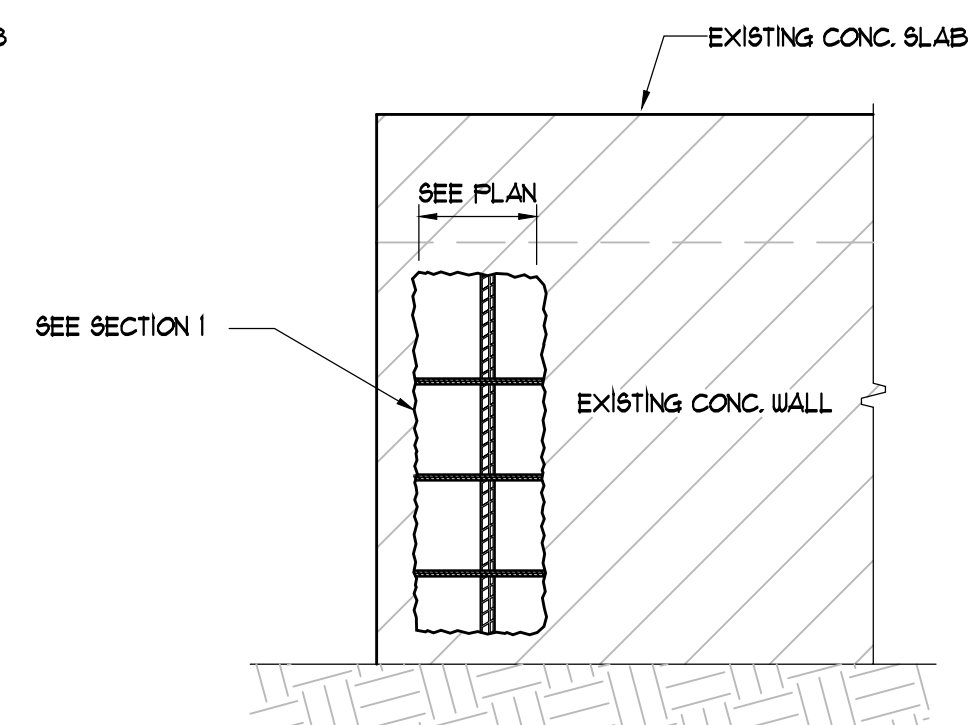
Diagram illustrating a section through a concrete member showing repair details:

- SAW-CUT 1/4" - 1/2" DEEP AND AS PER MANUF. RECOMMENDATIONS ALONG REPAIR AREA TYP.
- PREPARED CONCRETE SURFACE TO RECEIVE PATCH; SEE MANUF. SPECIFICATION
- OXIDIZED (CORRODED) BARS
- 3/4" MIN. CLEARANCE REFER TO NOTE #1
- SEPARATE BARS 1/4" AND CLEAN CONTACT AREA
- 2" OF "GOOD" UNCORRODED REINFORCING BARS BEYOND POINT OF CORROSION/SCALEY RUST
- UNOXIDIZED & TIGHTLY BONDED BARS REFER TO NOTE #3
- 3/4"
- 3/4"
- SECTION THROUGH CONCRETE MEMBER

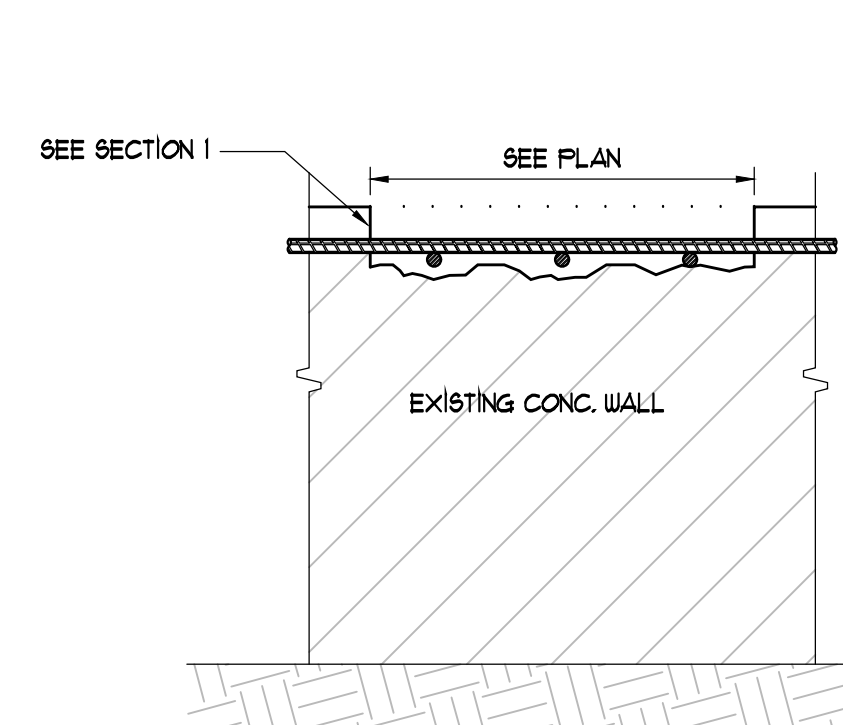
- ### REPAIR PROCEDURE & INSPECTION SCHEDULE:
- INSPECTION 1: PRELIMINARY INSPECTION / MEETING WITH CONTRACTOR PRIOR TO START OF CONSTRUCTION.
- 2: REMOVE ALL LOOSE CONCRETE AT ALL MARKED AREAS OR AS INDICATED ON DRAWINGS, IF AREAS ARE NOT MARKED IN FIELD NOTIFY GSW FOR INSPECTION TO MARK AREAS IN NEED OF REPAIR.
 - 3: PERFORM ADDITIONAL CHIPPING IF REQUIRED BY GSW AFTER INSPECTION 2.
 - 4: AFTER STEP TWO AND THREE ARE APPROVED, PROPERLY PREPARE ALL EXISTING CONCRETE SURFACES FOR CRITICAL DETAILS AND NOTES. PROPERLY CLEAN ALL EXPOSED REBAR.
 - 5: FINAL OBSERVATION OF PREPARED AREAS. IF ADDITIONAL CLEANING OR PREPARATION IS REQUIRED REINSPECTION IS NEEDED.
 - 6: OBSERVATION OF BONDING AGENT APPLIED AS APPLICABLE.
 - 7: OBSERVATION OF COMPLETED CONCRETE IN PLACE. ANY UNBONDED OR CRACKED CONCRETE MUST BE REMOVED AND REPAIRED PER PREVIOUS STEPS.



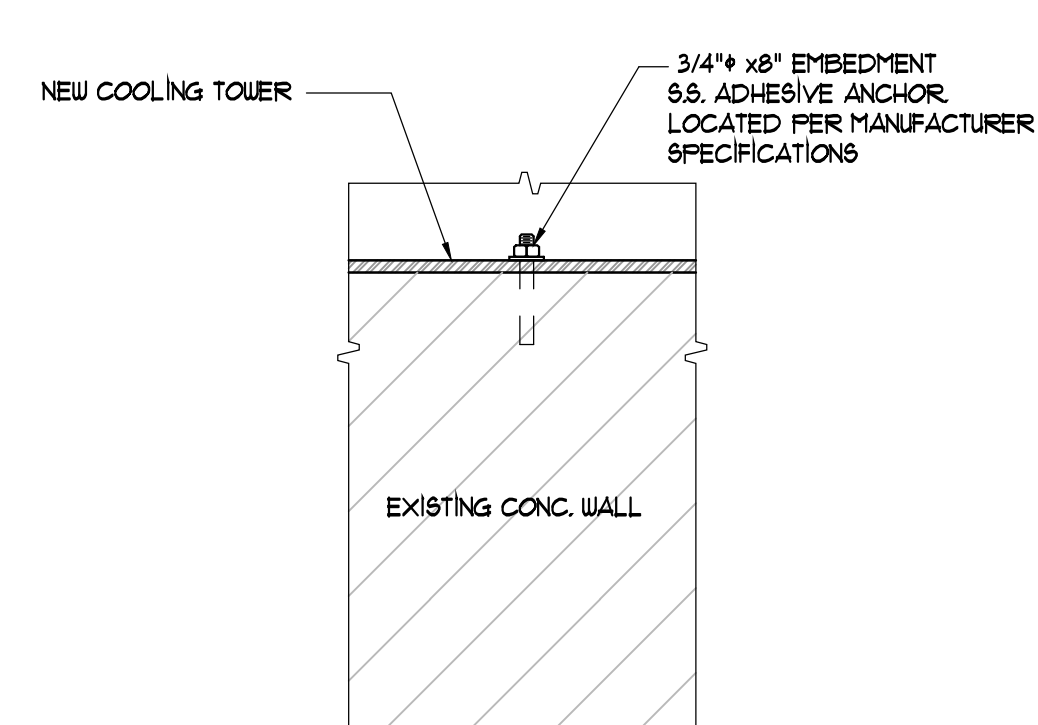
SCALE: 1" = 1'-0"



SCALE: 1" = 1'-0"

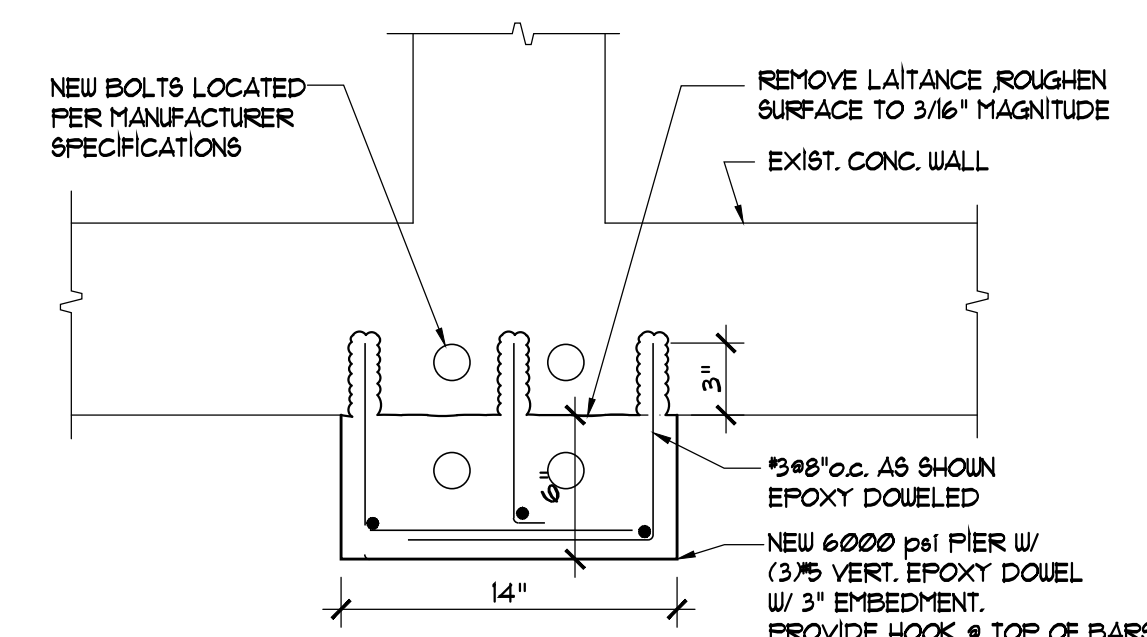


SCALE: 1" = 1'-0"



SCALE: 1 1/2" = 1'-0"

CONCRETE RESTAURATION BID QUANT.	
WALL	± 12'-4"
T.O.S	± 4'-0"



8300 South Palm Road
Pembroke Pines, Florida 33025
City of Pembroke Pines

[illegible]

PROJECT NUMBER:
DRAWN BY:
CHECKED BY:

SHEET TITLE

SHEET TITLE

S-1.0

CSW

STRUCTURAL ENGINEERS

5397 Orange Drive,
Suite 203 Davie, FL 33314
Ph: (954) 316-9001

J. Marc Sauer, State of Florida, Professional Engineer,
License No. 57685. This form has been digitally signed by
J. Marc Sauer, P.E. on the date indicated here using a
SHA authentication code. PRINTED COPIES OF THIS
DOCUMENT ARE NOT CONSIDERED SIGNED AND
SEALED! This digital signature and the SHA authentication
code must be verified on any electronic copies.

J Sauve, P.E.
FL, PE # 57585
FL, CA # 30123

ACORD CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD[YY])
PRODUCER		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
		INSURERS AFFORDING COVERAGE
INSURED		INSURER A:
YOUR COMPANY NAME HERE		INSURER B.
		INSURER C.
		INSURER D.
		INSURER E.
		Companies providing coverage

COVERAGES					
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.					
INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DDIYY)	POLICY EXPIRATION DATE (MM/DDIYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> policy <input type="checkbox"/> project <input type="checkbox"/> loc	Must Include General Liability			EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		SAMPLE CERTIFICATE		
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				
	EXCESS LIABILITY OCCUR <input type="checkbox"/> CLAIMS MADE DEDUCTIBLE RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATUTORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCL		Certificate must contain wording similar to what appears below
"THE CERTIFICATE HOLDER IS NAMED AS ADDITIONALLY INSURED WITH REGARD TO GENERAL LIABILITY"		

CERTIFICATE HOLDER	ADDITIONAL INSURED; INSURER LETTER:	CANCELLATION
City of Pembroke Pines 601 City Center Way Pembroke Pines FL 33025		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE, MAIL <u>30</u> DAYS WRITTEN LEFT.
City Must Be Named as Certificate Holder		AUTHORIZED REPRESENTATIVE



FINAL/PARTIAL RELEASE OF LIEN

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, for and in consideration of the payment of the sum of \$ [Payment Amount] and other valuable consideration, paid by **City of Pembroke Pines**, receipt of which is hereby acknowledge, hereby releases and quit claims to the said [Contractor Name] its successors and assigns, and

City of Pembroke Pines

The owner, all liens, lien rights, claims and demands of any kind whatsoever, which the undersigned now has or might have against the building on premises legally described as:

[Description]
PO #: [PO #]

Invoice #: [Invoice #]

On account of labor performed and/or material furnished for the construction of any improvements thereon. That all labor and materials used by the undersigned in the erection of said improvements have been fully paid for:

Witnesses:

CONTRACTOR
[NAME OF CONTRACTOR]

BY: _____

Print Name: _____

Title: _____

STATE OF FLORIDA)
) ss:
COUNTY OF BROWARD)

ON THIS _____ day of _____, 20____, before me, the undersigned notary public, personally appeared [Contractor's Representative] as [Job Title] of [Name of Contractor], personally known to me, or who has produced _____ as identification, and is the person who subscribed to the foregoing instrument and who acknowledged that (s)he executed the same and that (s)he was duly authorized to do so.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

NOTARY PUBLIC

Print or Type Name

My Commission Expires:



CONSTRUCTION AGREEMENT
BETWEEN THE CITY OF PEMBROKE PINES
AND {---Company Name---}

THIS AGREEMENT ("Agreement"), dated _____, is entered into by and between:

CITY OF PEMBROKE PINES, a municipal corporation of the State of Florida with a business address of **601 City Center Way, Pembroke Pines, Florida 33025** hereinafter referred to as "CITY",

and

{---Company Name---}, **{---Corporation Type---}**, as listed with the Florida Division of Corporations, authorized to do business in the State of Florida, and with a business address of **{---Street1---} {---Street2---}, {---City---}, {---State/Province---} {---Postal Code---}** (hereinafter referred to as the "CONTRACTOR"). CITY and CONTRACTOR may hereinafter be referred to collectively as the "Parties."

W I T N E S S E T H:

In consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, CITY and CONTRACTOR agree as follows:

ARTICLE 1
PREAMBLE

In order to establish the background, context and form of reference for this Agreement, and to generally express the objectives and intentions of the respective Parties herein, the following statements, representations, and explanations shall be accepted as predicates for the undertakings and commitments included within the provisions which follow, and may be relied upon by the Parties as essential elements of the mutual considerations upon which this Agreement is based.

1.1 On **{---Solicitation Advertisement Date---}**, the CITY advertised its notice to bidders of the CITY's desire to hire a firm to **{---Solicitation Service Description---}** as more particularly described in **Exhibit "A"** attached hereto and by this reference made a part hereof, for the said bid entitled:

{---Solicitation Type Abbreviation---} # {---Solicitation Number---}
"{---Solicitation Title---}"

1.2 On **{---Bid Opening Date---}**, the bids were opened at the offices of the City Clerk.



1.3 On _____, the CITY awarded the bid to CONTRACTOR and authorized the proper CITY officials to negotiate and enter into an agreement with CONTRACTOR to render the services more particularly described herein below.

1.4 Negotiations pertaining to the services to be performed by the CONTRACTOR were undertaken and this Agreement incorporates the results of such negotiation.

ARTICLE 2

SERVICES AND RESPONSIBILITIES

2.1 CONTRACTOR hereby agrees to perform the services for the {---**Solicitation Service Description**---}, at {---**Location Address**---} ("Property") as more particularly described in, and in accordance with the CITY's "{---**Solicitation Type Abbreviation**---} # {---**Solicitation Number**---}", attached hereto and made a part hereof as **Exhibit "A"** and CONTRACTOR's response thereto, attached hereto and made a part hereof as **Exhibit "B"**. CONTRACTOR agrees to perform all services required pursuant to this Agreement, the Sealed Bid Package, Addenda to this Agreement, and Commission award complete with proposal form.

2.2 CONTRACTOR shall furnish all services, labor, equipment, and materials necessary and as may be required in the performance of this Agreement, except as otherwise specifically provided for herein, and all work performed under this Agreement shall be done in a professional manner.

2.3 CONTRACTOR shall supervise the work force to ensure that all workers conduct themselves and perform their work in a safe and professional manner. CONTRACTOR shall comply with all OSHA safety rules and regulations in the operation of equipment and in the performance of the work. CONTRACTOR shall at all times have a competent field supervisor available to enforce these policies and procedures at the CONTRACTOR's expense.

2.4 CONTRACTOR shall provide CITY with seventy-two (72) hours written notice prior to the beginning of work under this Agreement and prior to any schedule change with the exception of changes caused by inclement weather.

2.5 CONTRACTOR hereby represents to CITY, with full knowledge that CITY is relying upon these representations when entering into this Agreement with CONTRACTOR, that CONTRACTOR has the professional expertise, experience and manpower to perform the services to be provided by CONTRACTOR pursuant to the terms of this Agreement.

2.6 CONTRACTOR hereby represents to CITY that CONTRACTOR is properly licensed by the applicable federal, state, and local agencies to provide the services under this Agreement. Furthermore, CONTRACTOR agrees to maintain such licenses during the term of this Agreement. If CONTRACTOR's license is revoked, suspended, or terminated for any reason by any governmental agency, CONTRACTOR shall notify the CITY immediately.

2.7 CONTRACTOR shall comply with any and all Federal, State, and local laws and regulations now in effect, or hereinafter enacted during the term of this Agreement, which are applicable to CONTRACTOR, its employees, agents or subcontractors, if any, with respect to the



work and services described herein. A violation of any federal, state, or local law or regulation may be cause for breach, allowing the CITY to terminate this Agreement.

2.8 CONTRACTOR shall gain prior written approval from the CITY prior to engaging any subconsultants, subcontractors, or other professional associates to perform in connection with this Agreement. Any subcontract with a subcontractor or subconsultant shall afford to the CONTRACTOR rights against the subcontractor or subconsultant which correspond to those rights afforded to the CITY against the CONTRACTOR herein, including but not limited to those rights of termination as set forth herein. No reimbursement shall be made to the CONTRACTOR for any subconsultants that have not been previously approved by the CITY for use by the CONTRACTOR.

2.9 **Return of Keys.** Upon completion of services rendered or termination of this agreement, CONTRACTOR must promptly return to CITY all CITY keys and/or access cards. By agreeing herein, CONTRACTOR understands that any loss or failure to return a CITY key shall subject CONTRACTOR to the costs associated with key replacement and/or re-keying. For keys unlocking several doors, replacement and re-keying costs can be substantial. In case of failure to return a key and failure to pay for key replacement and/or lock re-keying, CONTRACTOR understands that CITY shall enforce by all legal means its right to repayment for all costs incident to key replacement and/or lock re-keying.

ARTICLE 3

TIME OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

3.1 The work to be performed under this Agreement shall be commenced after CITY execution of the Agreement and not later than ten (10) days after the date that CONTRACTOR receives CITY's Notice to Proceed. The work shall be completed within {---**Number of Days to Complete Project in Words**---} {---**Number of Days to Complete Project**---} calendar days from issuance of CITY's Notice to Proceed, subject to any permitted extensions of time pursuant to this Agreement and any amendments and/or addenda thereto. For the purposes of this Agreement, the term "completion" shall mean the satisfactory completion and final inspection of the Property by the CITY.

3.2 During the pre-construction portion of the work hereunder, the Parties agree to work diligently and in good faith in performing their obligations hereunder, so that all required permits for the construction portion of the work may be obtained. In the event that any delays in the pre-construction or construction portion of the work occur, despite the diligent efforts of the Parties hereto, and such delays are the result of force majeure or are otherwise outside of the control of either party hereto, then the Parties shall agree on an equitable extension of the time for substantial completion hereunder and any resulting increase in general condition costs.

3.3 In the event that CONTRACTOR abandons this Agreement or causes it to be terminated, CONTRACTOR shall indemnify CITY against any loss pertaining to this termination up to a maximum of the full contracted fee amount. All finished or unfinished documents, data, studies, surveys, and reports prepared by CONTRACTOR shall become the property of CITY and shall be delivered by CONTRACTOR to CITY.



3.4 **Termination for Convenience.** This Agreement may be terminated by CITY for convenience, upon providing **{---Termination for Convenience---**} of written notice to CONTRACTOR for such termination in which event CONTRACTOR shall be paid its compensation for services performed to termination date, including services reasonably related to termination. In the event that CONTRACTOR abandons this Agreement or causes it to be terminated, CONTRACTOR shall indemnify CITY against loss pertaining to this termination.

3.5 **Default by CONTRACTOR.** In addition to all other remedies available to CITY, this Agreement shall be subject to cancellation by CITY for cause, should CONTRACTOR neglect or fail to perform or observe any of the terms, provisions, conditions, or requirements herein contained, if such neglect or failure shall continue for a period of **thirty (30) calendar days** after receipt by CONTRACTOR of written notice of such neglect or failure.

ARTICLE 4 **COMPENSATION AND METHOD OF PAYMENT**

4.1 CITY agrees to compensate CONTRACTOR for all services performed under this Agreement by CONTRACTOR for work that has been completed, inspected and properly invoiced. The total compensation for all services shall not exceed **{---Request Amount Written---**} (**{---Request Amount Numerical---**}) which includes an owner's contingency fee in the amount of **{---Contingency Fee in Words---**} (**{---Contingency Fee Amount---**}) and an amount towards the payment and performance bond equal to _____.

4.1.1 This contingency or allowance authorizes the CITY to execute change orders up to the amount of the contingency without the need to obtain additional Commission approval. In addition, CITY shall utilize the owner's contingency to reimburse CONTRACTOR for the related permit, license, impact or inspection fees. Payments will be made to CONTRACTOR based on the actual cost of permits upon submission of paid permit receipts. **It is hereby understood and agreed that the CONTRACTOR shall not expend any dollars in connection with the owner's contingency or allowance without the expressed prior written approval of the CITY's authorized representative.** Any owner's contingency funds or allowance that have not been utilized at the end of the project will remain with the CITY, the CONTRACTOR shall only be paid for the proposed project cost as approved by the City Commission along with any owner contingency expenses or allowances that were approved by the CITY's authorized representative. If the permit fees exceed the Owner's Contingency indicated, CITY will reimburse the contractor the actual amount of the permit fees required for project completion.

4.1.2 The total compensation amount may not be exceeded without a written amendment to this Agreement. A retainage of five percent (5%) will be deducted from monthly payments until the project is complete. Retainage monies will be released upon satisfactory completion and final inspection of the work. Invoices must bear the project name, project number, bid number and purchase order number. CITY has up to thirty (30) days to review, approve and pay all invoices after receipt. CONTRACTOR shall invoice CITY and provide a written request to CITY to commence the one (1) year warranty period. All necessary Releases and



Affidavits and approval of final payments shall be processed before the warranty period begins.

4.2 **Prompt Payment Act.** All payments shall be governed by the Local Government Prompt Payment Act, as set forth in Part VII, Chapter 218, Florida Statutes.

4.3 **Method of Billing and Payment.** The CITY shall within thirty (30) calendar days, from the date the CITY's Authorized Representative approves the Application for Payment, pay the CONTRACTOR the amount approved by the CITY's Authorized Representative or his/her assignees. Invoices submitted by CONTRACTOR shall include the date of service, services performed, hours spent, location of services, description of the assignment/project, date of completion and any other information reasonable required by the CITY.

Payment will be made to CONTRACTOR at:

{---Company Name---}
{---Payment Street 1---}, {---Payment Street 2---}
{---Payment City---}, {---Payment State/Province---} {---Payment Postal Code---}

ARTICLE 5

WAIVER OF LIENS

Prior to final payment of the amount due under the terms of this Agreement, a final waiver of lien shall be submitted by the CONTRACTOR as well as all suppliers and subcontractors who worked on the project that is the subject of this Agreement. Payment of the invoice and acceptance of such payment by CONTRACTOR shall release CITY from all claims of liability by CONTRACTOR in connection with this Agreement.

ARTICLE 6

WARRANTY

CONTRACTOR warrants the work against defect for a period of one (1) year from the date of completion of work. In the event that defect occurs during this time, CONTRACTOR shall perform such steps as required to remedy the defects. CONTRACTOR shall be responsible for any damages caused by defect to affected area or to interior structure. The one (1) year warranty period does not begin until substantial completion of the entire project, and the subsequent release of any Performance or Payment Bonds, which may be required by the original bid document.

ARTICLE 7

CHANGES IN SCOPE OF WORK

7.1 CITY or CONTRACTOR may request changes that would increase, decrease, or otherwise modify the scope of work, as more specifically described herein. These changes may affect the monthly compensation accordingly. Such changes or additional services must be in accordance with the provisions of the Code of Ordinances of the CITY, and must be contained in a written change order or amendment, executed by the Parties hereto, with the same formality, equality and



dignity herewith prior to any deviation from the terms of this Agreement, including the initiation of any additional or extra work. In no event will the CONTRACTOR be compensated for any work which has not been described either herein or in a separate written change order, amendment or agreement executed by the Parties hereto.

7.2 While requesting changes that would increase, decrease, or otherwise modify the scope of work, CONTRACTOR shall continue work, however, in no event will CONTRACTOR be compensated for any work that has not been described either herein, or by a change order, written amendment or separate written agreement, executed by the parties hereto, with the same formality, equality, and dignity herewith.

ARTICLE 8

PAYMENT & PERFORMANCE BONDS

8.1 Within fifteen (15) calendar days after Notice of Award and in any event prior to commencing work, the CONTRACTOR shall execute and furnish to CITY a Payment Bond and a Performance Bond, each written by a corporate surety, having a resident agent in the State of Florida and having been in business with a record of successful continuous operation for at least five (5) years. The surety shall hold a current certificate of authority from the Secretary of Treasury of the United States as an acceptable surety on federal bonds in accordance with United States Department of Treasury Circular No. 570. If the amount of the bonds exceeds the underwriting limitation set forth in the circular, in order to qualify, the net retention of the surety company shall not exceed the underwriting limitation in the circular and the excess risks must be protected by coinsurance, reinsurance, or other methods, in accordance with Treasury Circular 297, revised September 1, 1978 (31DFR, Section 223.10, Section 223.11). Further, the surety company shall provide CITY with evidence satisfactory to CITY, that such excess risk has been protected in an acceptable manner. The surety company shall have at least the following minimum qualification in accordance with the latest edition of A.M. Best's Insurance Guide, published by Alfred M. Best Company, Inc., Ambest Road, Oldwick, New Jersey 08858:

B+ to A+

8.2 Two (2) separate bonds are required and both must be approved by the CITY. **The penal sum stated in each bond shall be 100% of the project value.** The Performance Bond shall be conditioned upon the CONTRACTOR's performance of the work in the time and manner prescribed in the Agreement. The Payment Bond shall be conditioned upon the CONTRACTOR's promptly making payments to all persons who supply the CONTRACTOR with labor, materials and supplies used directly or indirectly by the CONTRACTOR in the prosecution of the work provided for in this Agreement and shall provide that the surety shall pay the same in the amount not exceeding the sum provided in such bonds, together with interest at the maximum rate allowed by law; and that they shall indemnify and save harmless the CITY to the extent of any and all payments in connection with the carrying out of said Agreement which the CITY may be required to make under the law.

8.3 Pursuant to the requirements of Section 255.05(1)(a), Florida Statutes, it shall be the duty of the CONTRACTOR to record the aforesaid Payment Bond and Performance Bond in the public records of Broward County, and CONTRACTOR shall be responsible for payment of all recording costs.



ARTICLE 9

INDEMNIFICATION

9.1 CONTRACTOR shall indemnify and hold harmless the CITY, its officers, agents, assigns, employees, consultants, separate contractors, any of their subcontractors, and sub-subcontractors from and against claims, demands, or causes of action whatsoever, and the resulting losses, damages, costs and expenses, including but not limited to attorney's fees, including paralegal expenses, liabilities, damages, orders, judgments, or decrees, sustained by the CITY arising out of or resulting from performance of this Agreement, the failure of CONTRACTOR to take out and maintain insurance as required under this Agreement, and any negligent act or omission of CONTRACTOR, its employees, agents, partners, principals, subcontractors, and officers. The CONTRACTOR shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the CITY, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorneys' fees which may issue thereon.

9.2 Upon completion of all services, obligations and duties provided for in this Agreement, or in the event of termination of this Agreement for any reason, the terms and conditions of this Article shall survive indefinitely.

9.3 CITY reserves the right to select its own legal counsel to conduct any defense in any such proceeding and all costs and fees associated therewith shall be the responsibility of CONTRACTOR.

9.4 CONTRACTOR shall be liable for any accident, loss, injury or damages to persons and/or property arising out of and/or resulting from CONTRACTOR's performance of the work required by this Agreement.

9.5 Nothing contained herein is intended nor shall be construed to waive CITY's rights and immunities under the common law or Section 768.28, Florida Statutes, as may be amended from time to time.

ARTICLE 10

INSURANCE

10.1 CONTRACTOR expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the CONTRACTOR shall in no way limit the responsibility to indemnify, keep and save harmless and defend the CITY or its officers, employees, agents and instrumentalities as herein required.

10.2 CONTRACTOR AND ALL SUBCONTRACTORS, SHALL NOT BE ALLOWED TO commence work under this AGREEMENT until the CONTRACTOR has obtained all insurance required by this Insurance Section, including the purchase of a Policy of Insurance naming the City of Pembroke Pines as an Additional Named Insured, which Insurance Policy and its terms must be agreed to and approved in writing by the Risk Manager for the City of Pembroke Pines



, nor shall any SUBCONTRACTOR be allowed to commence work under this AGREEMENT until the SUBCONTRACTOR complies with the Insurance requirements required by this Insurance Section, including the duty to purchase a Policy of Insurance which names the City of Pembroke Pines as an Additional Named Insured, which Insurance Policy and its terms are agreed to and approved in writing by the Risk Manager for the City of Pembroke Pines.

10.3 Certificates of Insurance, reflecting evidence of the required insurance, shall be filed with the CITY's Risk Manager prior to the commencement of this Agreement. Policies shall be issued by companies authorized to do business under the laws of the State of Florida. The insurance company shall be rated no less than "A" as to management, and no less than "Class VI" as to financial strength according to the latest edition of Best's Insurance Guide published by A.M. Best Company.

10.4 Certificates of Insurance shall provide for thirty (30) calendar days' prior written notice to the CITY in case of cancellation or material changes in the policy limits or coverage states. If the carrier cannot provide thirty (30) calendar days' notice of cancellation, either the CONTRACTOR or their Insurance Broker must agree to provide notice.

10.5 Insurance shall be in force until all obligations required to be fulfilled under the terms of the Agreement are satisfactorily completed as evidenced by the formal acceptance by the CITY. In the event the insurance certificate provided indicates that the insurance shall terminate and lapse during the period of this Agreement, the CONTRACTOR shall furnish, at least forty-five (45) calendar days prior to the expiration of the date of such insurance, a renewed certificate of insurance as proof that equal and like coverage for the balance of the period of the Agreement and extension thereunder is in effect. The CONTRACTOR shall neither commence nor continue to provide any services pursuant to this Agreement unless all required insurance remains in full force and effect. CONTRACTOR shall be liable to CITY for any lapses in service resulting from a gap in insurance coverage.

10.6 REQUIRED INSURANCE

CONTRACTOR shall be required to obtain all applicable insurance coverage, as indicated below, prior to commencing any work pursuant to this Agreement:

Yes No

☐ ☐

10.6.1 Comprehensive General Liability Insurance written on an occurrence basis including, but not limited to: coverage for bodily injury and property damage, personal & advertising injury, products & completed operations, and contractual liability. Coverage must be written on an occurrence basis, with limits of liability no less than:

1. Each Occurrence Limit - \$1,000,000
2. Fire Damage Limit (Damage to rented premises) - \$100,000
3. Personal & Advertising Injury Limit - \$1,000,000
4. General Aggregate Limit - \$2,000,000
5. Products & Completed Operations Aggregate Limit - \$2,000,000

Aggregate Reduction: CONTRACTOR shall advise the CITY in the event any aggregate limits are reduced below the required per-occurrence limit. At its own expense, the



CONTRACTOR will reinstate the aggregate limits to comply with the minimum requirements and shall furnish the CITY with a new certificate of insurance showing such coverage is in force.

Products & Completed Operations Coverage shall be maintained for the later of three (3) years after the delivery of goods/services or final payment under the Agreement. *(For Construction projects: Increase to ten (10) years and include a Designated Construction Project(s) General Aggregate Limit)* **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

☐ ☐

10.6.2 Workers' Compensation and Employers' Liability Insurance covering all employees, and/or volunteers of the CONTRACTOR engaged in the performance of the scope of work associated with this Agreement. In the case any work is sublet, the CONTRACTOR shall require the subcontractors similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. Coverage for the CONTRACTOR and all subcontractors shall be in accordance with applicable state and/or federal laws that may apply to Workers' Compensation Insurance with limits of liability no less than:

1. Workers' Compensation: Coverage A – Statutory
2. Employers Liability: Coverage B \$500,000 Each Accident
\$500,000 Disease – Policy Limit
\$500,000 Disease – Each Employee

If CONTRACTOR claims to be exempt from this requirement, CONTRACTOR shall provide CITY proof of such exemption for CITY to exempt CONTRACTOR.

Yes No

☐ ☐

10.6.3 Comprehensive Auto Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the performance of work under this Agreement, with a combined single limit of liability for bodily injury and property damage no less than:

1. Any Auto (Symbol 1)
Combined Single Limit (Each Accident) - \$1,000,000
2. Hired Autos (Symbol 8)
Combined Single Limit (Each Accident) - \$1,000,000
3. Non-Owned Autos (Symbol 9)
Combined Single Limit (Each Accident) - \$1,000,000

If work under this Agreement includes transportation of hazardous materials, policy shall include pollution liability coverage equivalent to that provided by the latest version of the ISO pollution liability broadened endorsement for auto and the latest version of the ISO Motor Carrier Act endorsement, equivalents or broader language.

Yes No

☐ ☐

10.6.3.1 If CONTRACTOR requests reduced limits under a Personal Auto



Liability Policy and it is agreed to by the CITY, coverage shall include Bodily Injury limits of \$100,000 per person/\$300,000 per occurrence and Property Damage limits of \$300,000 per occurrence

Yes No

- ☐ ☐ 10.6.4 Umbrella/Excess Liability Insurance in the amount of \$_____ as determined appropriate by the CITY depending on the type of job and exposures contemplated. Coverage must be follow form of the General Liability, Auto Liability and Employer's Liability. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment pursuant to this Agreement. **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

- ☐ ☐ 10.6.5 Professional Liability/Errors & Omissions Insurance with a limit of liability no less than \$1,000,000 per wrongful or negligent act. This coverage shall be maintained for a period of no less than three (3) years after the delivery of goods/services final payment pursuant to this Agreement. Retroactive date, if any, to be no later than the first calendar day of service to the CITY. *(Limit to align with size and scope of the Agreement and exposure inherent with operation/services being performed. For Construction projects: Increase to ten (10) years.)*

Yes No

- ☐ ☐ 10.6.6 Environmental/Pollution Liability insurance shall be required with a limit of no less than \$1,000,000 per wrongful act. Coverage shall include: CONTRACTOR's completed operations, sudden, accidental and gradual pollution conditions. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment pursuant to this Agreement. Retroactive date, if any, to be no later than the first calendar day of service to the CITY. *(Limit to align with size and scope of the Agreement and exposure inherent with operation/services being performed. For Construction projects: Increase to ten (10) years).* **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

- ☐ ☐ 10.6.7 Cyber Liability including Network Security and Privacy Liability with a limit of liability no less than \$1,000,000 per loss. Coverage shall include liability arising from: theft, dissemination and/or use of confidential information stored or transmitted in electronic form, unauthorized access to, use of, or tampering with computer systems, including hacker attacks or inability of an authorized third party to gain access to your services, including denial of service, and the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network, or similar computer-related property and the data, software and programs thereon. If vendor is collecting credit card information, it shall cover all PCI breach expenses. Coverage is to include the various state monitoring and state required remediation as well as meet the various state notification requirements. This coverage shall be maintained for a period of no less than the later of three (3) years after delivery of goods/services or final payment of the Agreement. Retroactive date, if any, to be no later than the first calendar day of service to the CITY. **The City of Pembroke Pines must be shown as an additional**



insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.

Yes No

☐ ☐

10.6.8 Crime Coverage shall include employee dishonesty, forgery or alteration, and computer fraud in an amount of no less than \$1,000,000 per loss. If CONTRACTOR is physically located on CITY's premises, a third-party fidelity coverage extension shall apply.

Yes No

☐ ☐

10.6.9 Garage Liability & Garage-keepers Legal Liability for those that manage parking lots for the CITY or service CITY vehicles. Coverage must be written on an occurrence basis, with limits of liability no less than \$1,000,000 per Occurrence, including products & completed operations. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment of this Agreement. **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

☐ ☐

10.6.10 Liquor Liability for those in the business of selling, serving or furnishing of any alcoholic beverages, whether licensed or not, shall carry a limit of liability of no less than \$1,000,000 per occurrence. Coverage shall be maintained for the later of three (3) years after the delivery of goods/services or final payment under the Agreement. **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

☐ ☐

10.6.11 Sexual Abuse & Molestation for any agreement involving a vulnerable population. Limits shall be no less than \$500,000 per occurrence. This coverage shall be maintained for a period of no less than the later of three (3) years after the delivery of goods/services or final payment of this Agreement. Retroactive date, if any, to be no later than the first calendar day of service to the CITY. *(Limit to align with size and scope of the Agreement and exposure inherent with operation/services being performed.)* **The City of Pembroke Pines must be shown as an additional insured with respect to this coverage. The CITY's additional insured status shall extend to any coverage beyond the minimum limits of liability found herein.**

Yes No

☐ ☐

10.6.12 Builder's Risk Insurance shall be "All Risk" for one hundred percent (100%) of the completed value of the project that is the subject of this Agreement with a deductible of not more than five percent (5%) for Named Windstorm and \$20,000 per claim for all other perils. The Builder's Risk Insurance shall include interests of the CITY, the CONTRACTOR and subcontractors of the project. The CONTRACTOR shall include a separate line item for all costs associated with the Builder's Risk Insurance Coverage for the project. The CITY reserves the right at its sole discretion to utilize the CONTRACTOR's Builder's Risk Insurance or for the CITY to purchase its own Builder's Risk Insurance for the Project. Prior to the CONTRACTOR purchasing the Builder's Risk insurance for the project, the CONTRACTOR shall allow the CITY the opportunity to analyze the CONTRACTOR's coverage and determine who shall purchase the coverage.



Should the CITY utilize the CONTRACTOR's Builder's Risk Insurance, the CONTRACTOR shall be responsible for all deductibles. If the CITY chooses to purchase the Builder's Risk Coverage on the project, the CONTRACTOR shall provide the CITY with a change order deduct for all premiums and costs associated with the Builder's Risk insurance in their schedule. Should the CITY choose to utilize the CITY's Builder's Risk Program, the CITY shall be responsible for the Named Windstorm Deductible and the CONTRACTOR shall be responsible for the All Other Perils Deductible.

If and when 100% is not available or reasonable, the CITY Risk Manager is to make the determination as to what limits are appropriate for the given project.

Yes No

☐ ☐

10.6.13 Other Insurance

10.7 REQUIRED ENDORSEMENTS

10.7.1 The City of Pembroke Pines shall be named as an Additional Insured on each of the Liability Policies required herein.

10.7.2 Waiver of all Rights of Subrogation against the CITY.

10.7.3 Thirty (30) calendar day Notice of Cancellation or Non-Renewal to the CITY.

10.7.4 CONTRACTOR's policies shall be Primary & Non-Contributory.

10.7.5 All policies shall contain a "severability of interest" or "cross liability" clause without obligation for premium payment of the CITY.

10.7.6 The City of Pembroke Pines shall be named as a Loss Payee on all Property and/or Inland Marine Policies as their interest may appear.

10.8 Any and all insurance required of the CONTRACTOR pursuant to this Agreement must also be required by any subcontractor in the same limits and with all requirements as provided herein, including naming the CITY as an additional insured, in any work that is subcontracted unless such subcontractor is covered by the protection afforded by the CONTRACTOR and provided proof of such coverage is provided to CITY. The CONTRACTOR and any subcontractors shall maintain such policies during the term of this Agreement.

10.9 The CITY reserves the right to require any other additional types of insurance coverage and/or higher limits of liability it deems necessary based on the nature of work being performed under this Agreement.



10.10 The insurance requirements specified in this Agreement are minimum requirements and in no way reduce any liability the CONTRACTOR has assumed in the indemnification/hold harmless section(s) of this Agreement.

ARTICLE 11

NON-DISCRIMINATION & EQUAL OPPORTUNITY EMPLOYMENT

During the performance of the Agreement, neither the CONTRACTOR nor any subcontractors shall discriminate against any employee or applicant for employment because of race, religion, color, gender, national origin, sex, age, marital status, political affiliation, familial status, sexual orientation, or disability if qualified. CONTRACTOR will take affirmative action to ensure that employees are treated during employment, without regard to their race, religion, color, gender, national origin, sex, age, marital status, political affiliation, familial status, sexual orientation, or disability if qualified. Such actions must include, but not be limited to, the following: employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. CONTRACTOR shall agree to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. CONTRACTOR further agrees that CONTRACTOR will ensure that subcontractors, if any, will be made aware of and will comply with this nondiscrimination clause.

ARTICLE 12

INDEPENDENT CONTRACTOR

This Agreement does not create an employee/employer relationship between the Parties. It is the intent of the Parties that the CONTRACTOR is an independent contractor under this Agreement and not the CITY's employee for all purposes, including but not limited to, the application of the Fair Labor Standards Act minimum wage and overtime payments, Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, the State Workers' Compensation Act, and the State unemployment insurance law. The CONTRACTOR shall retain sole and absolute discretion in the judgment of the manner and means of carrying out CONTRACTOR's activities and responsibilities hereunder provided, further that administrative procedures applicable to services rendered under this Agreement shall be those of CONTRACTOR, which policies of CONTRACTOR shall not conflict with CITY, State, Federal, or United States policies, rules or regulations relating to the use of CONTRACTOR's funds provided for herein. The CONTRACTOR agrees that it is a separate and independent enterprise from the CITY, that it has full opportunity to find other business, that it has made its own investment in its business, and that it will utilize a high level of skill necessary to perform the work. This Agreement shall not be construed as creating any joint employment relationship between the CONTRACTOR and the CITY and the CITY will not be liable for any obligation incurred by CONTRACTOR, including but not limited to unpaid minimum wages and/or overtime premiums.

ARTICLE 13

RESERVED



ARTICLE 14
AGREEMENT SUBJECT TO FUNDING

This Agreement shall remain in full force and effect only as long as the expenditures provided for in the Agreement have been appropriated by the City Commission of the City of Pembroke Pines in the annual budget for each fiscal year of this Agreement, and is subject to termination based on lack of funding.

ARTICLE 15
UNCONTROLLABLE FORCES

15.1 Neither CITY nor CONTRACTOR shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to Uncontrollable Forces, the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid. The term "Uncontrollable Forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the reasonable control of the nonperforming party. It includes, but is not limited to fire, flood, earthquakes, storms, lightning, epidemic, pandemic, acts of God, war, riot, civil disturbance, sabotage, and governmental actions.

15.2 Neither party shall, however, be excused from performance if nonperformance is due to forces, which are preventable, removable, or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, prevented, removed, or remedied with reasonable dispatch. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement.

ARTICLE 16
GOVERNING LAW AND VENUE

This Agreement shall be governed by and construed in accordance with the laws of the State of Florida as now and hereafter in force. The venue for any and all actions or claims arising out of or related to this Agreement shall be in Broward County, Florida.

ARTICLE 17
SIGNATORY AUTHORITY

Upon CITY's request, CONTRACTOR shall provide CITY with copies of requisite documentation evidencing that the signatory for CONTRACTOR has the authority to enter into this Agreement.

ARTICLE 18
DEFAULT OF CONTRACT & REMEDIES

18.1 **Damages.** CITY reserves the right to recover any ascertainable actual damages incurred as a result of the failure of CONTRACTOR to perform in accordance with the requirements of this



Agreement, or for losses sustained by CITY resultant from CONTRACTOR's failure to perform in accordance with the requirements of this Agreement.

18.2 **Liquidated Damages.** As a breach of the service provided by this Agreement would cause serious and substantial damage to CITY Property, and the nature of this Agreement would render it impracticable or extremely difficult to fix the actual damage sustained by CITY by such breach, it is agreed that, in case of breach of service wherein CONTRACTOR fails to maintain the Property, leaving the said property in disrepair, CITY may elect to collect liquidated damages for each such breach, and CONTRACTOR will pay CITY as liquidated damages, and not as penalty, {---**Liquidated Damages Amount Written---**} (\$**{---Liquidated Damages Amount---**}) for every day of such malfunction. This sum is the agreed upon amount by which CITY will be damaged by the breach of such service. An election to seek such remedies shall not be construed as a waiver of any legal remedies CITY may have as to any subsequent breach of service under this Agreement.

18.3 **Correction of Work.** If, in the judgment of CITY, work provided by CONTRACTOR does not conform to the requirements of this Agreement, or if the work exhibits poor workmanship, CITY reserves the right to require that CONTRACTOR correct all deficiencies in the work to bring the work into conformance without additional cost to CITY, and/or replace any personnel who fail to perform in accordance with the requirements of this Agreement. CITY shall be the sole judge of non-conformance and the quality of workmanship.

18.4 **Default of Contract.** The occurrence of any one or more of the following events shall constitute a default and breach of this Agreement by CONTRACTOR:

18.4.1 The abandonment of the Property by CONTRACTOR for a period of more than seven (7) business days.

18.4.2 The abandonment, unnecessary delay, refusal of, or failure to comply with any of the terms of this Agreement or neglect, or refusal to comply with the instructions of the CITY's Authorized Representative relative thereto.

18.4.3 The failure by CONTRACTOR to observe or perform any of the terms, covenants, or conditions of this Agreement to be observed or performed by CONTRACTOR, where such failure shall continue for a period of seven (7) calendar days after written notice thereof by CITY to CONTRACTOR; provided, however, that if the nature of CONTRACTOR's default is such that more than seven (7) calendar days are reasonably required for its cure, then CONTRACTOR shall not be deemed to be in default if CONTRACTOR commences such cure within said seven (7) calendar day period and thereafter diligently prosecutes such cure to completion.

18.4.4 The assignment and/or transfer of this Agreement or execution or attachment thereon by CONTRACTOR or any other party in a manner not expressly permitted hereunder.

18.4.5 The making by CONTRACTOR of any general assignment or general arrangement for the benefit of creditors, or the filing by or against CONTRACTOR of a petition to have



CONTRACTOR adjudged a bankruptcy, or a petition for reorganization or arrangement under any law relating to bankruptcy (unless, in the case of a petition filed against CONTRACTOR, the same is dismissed within sixty (60) calendar days); or the appointment of a trustee or a receiver to take possession of substantially all of CONTRACTOR's assets, or for CONTRACTOR's interest in this Agreement, where possession is not restored to CONTRACTOR within thirty (30) calendar days; for attachment, execution or other judicial seizure of substantially all of CONTRACTOR's assets, or for CONTRACTOR's interest in this Agreement, where such seizure is not discharged within thirty (30) calendar days.

18.5 Remedies in Default. In case of default by CONTRACTOR, CITY shall notify CONTRACTOR, in writing, of such abandonment, delay, refusal, failure, neglect, or default and direct CONTRACTOR to comply with all provisions of this Agreement. A copy of such written notice shall be mailed to the Surety on the Performance Bond. If the abandonment, delay, refusal, failure, neglect or default is not cured within seven (7) calendar days of when notice was sent by CITY, CITY may declare a default of the Agreement and notify CONTRACTOR of such declaration of default and terminate the Agreement. The Surety on the Performance Bond shall within ten (10) days of such declaration of default, rectify or cause to be rectified any mismanagement or breach of service in the Agreement and assume the work of CONTRACTOR and proceed to perform services under the Agreement, at its own cost and expense.

18.5.1 Upon such declaration of default, all payments remaining due CONTRACTOR at the time of default, less all sums due CITY for damages suffered, or expenses incurred by reason of default, shall be due and payable to Surety. Thereafter the Surety shall receive monthly payments equal to those that would have been paid by the CONTRACTOR had the CONTRACTOR continued to perform the services under the Agreement.

18.5.2 CITY may complete the Agreement, or any part thereof, either by day labor or re-letting a contract for the same, and procure the equipment and the facilities necessary for the completion of the Agreement, and charge the cost of same to CONTRACTOR and/or the Surety together with the costs incident thereto to such default. CITY reserves the right to assign any remaining work at any Property location to another vendor as may be necessary to complete the Scope of Work.

18.5.3 In the event CITY completes the Agreement at a lesser cost than would have been payable to CONTRACTOR under this Agreement, if the same had been fulfilled by CONTRACTOR, CITY shall retain such differences. Should such cost to CITY be greater, CONTRACTOR shall pay the amount of such excess to the CITY.

18.5.4 Notwithstanding the other provisions in this Article, CITY reserves the right to terminate the Agreement at any time, whenever the service provided by CONTRACTOR fails to meet reasonable standards of the trade after CITY gives written notice to the CONTRACTOR of the deficiencies as set forth in the written notice within fourteen (14) calendar days of the receipt by CONTRACTOR of such notice from CITY.

ARTICLE 19



BANKRUPTCY

It is agreed that if CONTRACTOR is adjudged bankrupt, either voluntarily or involuntarily, then this Agreement shall terminate effective on the date and at the time the bankruptcy petition is filed.

ARTICLE 20 **MERGER; AMENDMENT**

This Agreement constitutes the entire Agreement between CONTRACTOR and CITY, and all negotiations and oral understandings between the Parties are merged herein. This Agreement can be supplemented or amended only by a written document executed by both CONTRACTOR and CITY with the same formality and equal dignity herewith.

ARTICLE 21 **DISPUTE RESOLUTION**

In the event that a dispute, if any, arises between CITY and CONTRACTOR relating to this Agreement, performance or compensation hereunder, CONTRACTOR shall continue to render service in full compliance with all terms and conditions of this Agreement as interpreted by CITY regardless of such dispute. CONTRACTOR expressly recognizes the paramount right and duty of CITY to provide adequate maintenance of CITY's Property, and further agrees, in consideration for the execution of this Agreement, that in the event of such a dispute, if any, it will not seek injunctive relief in any court, but will negotiate with CITY for an adjustment on the matter or matters in dispute and, upon failure of said negotiations to resolve the dispute, may present the matter to a court of competent jurisdiction in an appropriate suit therefore instituted by it or by CITY.

ARTICLE 22 **PUBLIC RECORDS**

22.1 The City of Pembroke Pines is public agency subject to Chapter 119, Florida Statutes. The CONTRACTOR shall comply with Florida's Public Records Law. Specifically, the CONTRACTOR shall:

22.1.1 Keep and maintain public records required by the CITY to perform the service;

22.1.2 Upon request from the CITY's custodian of public records, provide the CITY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

22.1.3 Ensure that public records that are exempt or that are confidential and exempt from public record disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and, following completion of the Agreement, CONTRACTOR shall destroy all copies of such confidential and exempt records remaining



in its possession after the CONTRACTOR transfers the records in its possession to the CITY; and

22.1.4 Upon completion of the Agreement, CONTRACTOR shall transfer to the CITY, at no cost to the CITY, all public records in CONTRACTOR's possession. All records stored electronically by the CONTRACTOR must be provided to the CITY, upon request from the CITY's custodian of public records, in a format that is compatible with the information technology systems of the CITY.

22.2 The failure of CONTRACTOR to comply with the provisions set forth in this Article shall constitute a Default and Breach of this Agreement and the CITY shall enforce the Default in accordance with this Agreement.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
601 CITY CENTER WAY, 4th FLOOR
PEMBROKE PINES, FL 33025
(954) 450-1050
drogers@ppines.com**

**ARTICLE 23
SCRUTINIZED COMPANIES**

23.1 CONTRACTOR, its principals or owners, certify that they are not listed on the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List, Scrutinized Companies with Activities in Iran Terrorism Sectors List, or is engaged in business operations with Syria. In accordance with Section 287.135, Florida Statutes, as amended, a company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with any agency or local governmental entity for goods or services of:

23.1.1 Any amount if, at the time bidding on, submitting a proposal for, or entering into or renewing such contract, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel; or

23.1.2 One million dollars or more if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company:



23.1.2.1 Is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in Iran Terrorism Sectors List, created pursuant to Section 215.473, Florida Statutes; or

23.1.2.2 Is engaged in business operations in Syria.

ARTICLE 24

EQUAL BENEFITS FOR EMPLOYEES

24.1 CONTRACTOR certifies that it is aware of the requirements of Section 35.39 of the CITY's Code of Ordinances and certifies that it is aware of the requirements of Section 35.39 of the CITY's Code of Ordinances and certifies that (**check only one box below**):

- ☐ CONTRACTOR currently complies with the requirements of Section 35.39 of the CITY's Code of Ordinances; or
- ☐ CONTRACTOR will comply with the conditions of Section 35.39 of the CITY's Code of Ordinances; or
- ☐ CONTRACTOR will not comply with the conditions of Section 35.39 of the CITY's Code of Ordinances; or
- ☐ CONTRACTOR does not comply with the conditions of Section 35.39 of the CITY's Code of Ordinances because of the following allowable exemption (**check only box below**):
 - ☐ CONTRACTOR does not provide benefits to employees' spouses in traditional marriages; or
 - ☐ CONTRACTOR provides an employee the cash equivalent of benefits because CONTRACTOR is unable to provide benefits to employees' Domestic Partners or spouses despite making reasonable efforts to provide them. To meet this exception, CONTRACTOR shall provide a notarized affidavit that it has made reasonable efforts to provide such benefits. The affidavit shall state the efforts taken to provide such benefits and the amount of the cash equivalent. Case equivalent means the amount of money paid to an employee with a Domestic Partner or spouse rather than providing benefits to the employee's Domestic Partner or spouse. The case equivalent is equal to the employer's direct expense of providing benefits to an employee's spouse; or
 - ☐ CONTRACTOR is a religious organization, association, society, or any non-profit charitable or educational institution or organization operated, supervised, or controlled by or in conjunction with a religious organization, association, or society; or
 - ☐ CONTRACTOR is a governmental agency.

24.2 Except where federal or state law mandates to the contrary, a contractor awarded a contract pursuant to a competitive solicitation shall provide benefits to Domestic Partners and spouses of



its employees, irrespective of gender, on the same basis as it provides benefits to employees' spouses in traditional marriages.

24.3 CONTRACTOR shall provide the City Manager and his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this Article, and upon request shall provide evidence that the CONTRACTOR is in compliance with the provisions of this Article upon the renewal of this AGREEMENT or when the City Manager or his/her designee receives a complaint or has reason to believe CONTRACTOR may not be in compliance with the provisions of this Article. Records shall include but not be limited to providing the City Manager and his/her designee with certified copies of CONTRACTOR's records pertaining to its benefits policies and its employment policies and practices.

24.4 CONTRACTOR must conspicuously make available to all employees and applicants for employment the following statement:

“During the performance of a contract with the City of Pembroke Pines, Florida, the CONTRACTOR will provide Equal Benefits to its employees with spouses, as defined by Section 35.39 of the City of Pembroke Pines Code of Ordinances, and its employees with Domestic Partners and all Married Couples”.

If CONTRACTOR has questions regarding the application of Section 35.39 of the City of Pembroke Pines Code of Ordinances to CONTRACTOR's duties pursuant to this Agreement, contact Human Resources at (954) 392-2092 or drotstein@ppines.com.

24.5 By executing this Agreement, CONTRACTOR certifies that it agrees to comply with the above and Section 35.39 of the City of Pembroke Pines Code of Ordinances, as may be amended from time to time.

ARTICLE 25

EMPLOYMENT ELIGIBILITY

25.1 **E-Verify.** CONTRACTOR certifies that it is aware of and complies with the requirements of Section 448.095, Florida Statutes, as may be amended from time to time and briefly described herein below.

25.1.1 Definitions for this Section.

25.1.1.1 “Contractor” means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

25.1.1.2 “Contractor” includes, but is not limited to, a vendor or consultant.

25.1.1.3 “Subcontractor” means a person or entity that provides labor,



supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

25.1.1.4 “E-Verify system” means an Internet-based system operated by the United States Department of Homeland Security that allows participating employers to electronically verify the employment eligibility of newly hired employees.

25.2 **Registration Requirement; Termination.** Pursuant to Section 448.095, Florida Statutes, effective January 1, 2021, Contractors, shall register with and use the E-verify system in order to verify the work authorization status of all newly hired employees. Contractor shall register for and utilize the U.S. Department of Homeland Security’s E-Verify System to verify the employment eligibility of:

25.2.1 All persons employed by a Contractor to perform employment duties within Florida during the term of the contract; and

25.2.2 All persons (including subvendors/subconsultants/subcontractors) assigned by Contractor to perform work pursuant to the contract with the City of Pembroke Pines. The Contractor acknowledges and agrees that registration and use of the U.S. Department of Homeland Security’s E-Verify System during the term of the contract is a condition of the contract with the City of Pembroke Pines; and

25.2.3 The Contractor shall comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes, but is not limited to registration and utilization of the E-Verify System to verify the work authorization status of all newly hired employees. Contractor shall also require all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than twenty (20) calendar days after the date of termination. Termination of this Contract under this Section is not a breach of contract and may not be considered as such. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of one (1) year after the date of termination.

ARTICLE 26

FEDERAL REQUIREMENTS

Notwithstanding anything to the contrary set forth herein, CONTRACTOR shall comply with the applicable federal requirements set forth in 2 C.F.R. Part 200, as may be applicable. In the event of any conflicts, the provisions of 2 C.F.R. Part 200 shall prevail. Any reference made to CONTRACTOR in this section shall also apply to any subcontractor under the terms of this Agreement. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses:



26.1 **Equal Employment Opportunity.** During the performance of this contract, CONTRACTOR agrees as follows:

26.1.1 CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

26.1.2 CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

26.1.3 CONTRACTOR will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with CONTRACTOR's legal duty to furnish information.

26.1.4 CONTRACTOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of CONTRACTOR's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

26.1.5 CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

26.1.6 CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary



of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

26.1.7 In the event of CONTRACTOR's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this Agreement may be canceled, terminated or suspended in whole or in part and CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

26.1.8 CONTRACTOR will include the provisions of paragraphs **(26.1.1)** through **(26.1.8)** in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. CONTRACTOR will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided*, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

The CITY further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the CITY so participating is a state or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The CITY further agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The CITY further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the CITY agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or



all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the CITY under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such CITY; and refer the case to the Department of Justice for appropriate legal proceedings.

26.2 **Davis-Bacon Act.** CONTRACTOR shall comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor Regulations (29 CFR Part 5). In accordance with the statute, CONTRACTOR must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, CONTRACTOR must be required to pay wages not less than once a week.

26.3 **Copeland “Anti-Kickback” Act.** CONTRACTOR shall comply with the Copeland “Anti-Kickback” Act, (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). CONTRACTOR must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. CITY must report all suspected or reported violations to the Federal awarding agency.

26.4 **Contract Work Hours and Safety Standards Act (40 U.S.C. 3701- 3708).** Where applicable, pursuant to 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5) CONTRACTOR must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous.

26.4.1 **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

26.4.2 **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (25.4.1) of this section the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in



violation of the clause set forth in paragraph (25.4.1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (25.4.1) of this section.

26.4.3 **Withholding for unpaid wages and liquidated damages.** CITY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by CONTRACTOR or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (25.4.2) of this section.

26.4.4 **Subcontracts.** CONTRACTOR or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (25.4.1) through (25.4.4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (25.4.1) through (25.4.4) of this section.

26.5 CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401- 7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251- 1387). CITY will report violations to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

26.5.1 **Clean Air Act.** CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. CONTRACTOR agrees to report each violation to CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the State, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office. CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance.

26.5.2 **Federal Water Pollution Control Act.** CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the State, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office. CONTRACTOR agrees to include these requirements in each subcontract exceeding one hundred fifty thousand dollars (\$150,000) financed in whole or in part with Federal assistance.



26.6 **Suspension and Debarment.** This Agreement is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000, as such CONTRACTOR is required to verify that none of the contractor's agents, principals (defined at 2 C.F.R. § 180.995), or affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

26.6.1 CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into. This certification is a material representation of fact relied upon by CITY. If it is later determined that CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to State and CITY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

26.6.2 The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

26.7 **Byrd Anti-Lobbying Amendment, as amended (31 U.S.C. § 1352).** CONTRACTOR shall file the required certification pursuant to 31 U.S.C. 1352. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

26.8 **Compliance with State Energy Policy and Conservation Act.** CONTRACTOR shall comply with all mandatory standards and policies relating to energy efficiency contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

26.9 **Procurement of Recovered Materials.** The CITY and CONTRACTOR must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

26.10 **Reporting.** Pursuant to 44 CFR 13.36(i)(7), CONTRACTOR shall comply with federal requirements and regulations pertaining to reporting, including but not limited to those set forth at



44 CFR 40 and 41, if applicable. Furthermore, both parties shall provide the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representative access to any books, documents, papers, and records of CONTRACTOR which are directly pertinent to this contract for the purpose of making audits, examinations, excerpts, and transcriptions. Also, both Parties agree to provide FEMA Administrator or his authorized representative access to construction or other work sites pertaining to the work being completed under the Agreement.

26.11 **Rights to Inventions.** CONTRACTOR agrees that if this Agreement results in any copyrightable materials or inventions, the Federal Government reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish or otherwise use the copyright of said materials or inventions for Federal Government purposes.

26.12 **No Obligation by the Federal Government.** The federal government is not a party to this contract and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

26.13 **DHS Seal, Logo, and Flags.** CONTRACTOR shall not use DHS(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific federal pre-approval.

26.14 **Compliance with Federal Law, Regulations, and Executive Orders.** This is an acknowledgement that federal financial assistance will be used to fund the Agreement only. CONTRACTOR will comply with all applicable federal law, regulations, executive orders, policies, procedures, and directives.

26.15 **Fraudulent Statements.** CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 applies to CONTRACTOR's actions pertaining to this Agreement.

26.16 **Prohibition on Contracting for Covered Telecommunications Equipment or Services.** As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause.

26.16.1 **Prohibitions.**

26.16.1.1 Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug. 13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

26.16.1.2 Unless an exception in paragraph 25.16.3 of this clause applies, the CONTRACTOR and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:



26.16.1.2.1 Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

26.16.1.2.2 Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

26.16.1.2.3 Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or

26.16.1.2.4 Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

26.16.2 **Exceptions.**

26.16.2.1 This clause does not prohibit CONTRACTOR from providing: (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

26.16.2.2 By necessary implication and regulation, the prohibitions also do not apply to: (i) Covered telecommunications equipment or services that: i. Are not used as a substantial or essential component of any system; and ii. Are not used as critical technology of any system. (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

26.16.3 **Reporting requirement.**

26.16.3.1 In the event CONTRACTOR identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph 25.16.3.2 of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.



26.16.3.2 The CONTRACTOR shall report the following information pursuant to paragraph 25.16.3.1 of this clause: (i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended. (ii) Within ten (10) business days of submitting the information in paragraph 25.16.3.1 of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services. The CONTRACTOR shall insert the substance of this clause, including this in all subcontracts and other contractual instruments.

26.17 **Domestic Preference for Procurements.** As appropriate, and to the extent consistent with law, the CONTRACTOR should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products. For purposes of this clause: *Produced in the United States* means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. *Manufactured products* mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

26.18 **Affirmative Socioeconomic Steps.** If subcontracts are to be let, CONTRACTOR is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

26.19 **License and Delivery of Works Subject to Copyright and Data Rights.** If applicable, the CONTRACTOR grants to CITY, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, CONTRACTOR will identify such data and grant to the CITY or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, CONTRACTOR will deliver to the CONTRACTOR data first



produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by CONTRACTOR.

ARTICLE 27

MISCELLANEOUS

27.1 **Ownership of Documents.** Reports, surveys, studies, and other data provided in connection with this Agreement are and shall remain the property of CITY, whether or not the project for which they are made is completed.

27.2 **Legal Representation.** It is acknowledged that each party to this Agreement had the opportunity to be represented by counsel in the preparation of this Agreement, and accordingly, the rule that a contract shall be interpreted strictly against the party preparing same shall not apply herein due to the joint contributions of both Parties.

27.3 **Records.** CONTRACTOR shall keep such records and accounts and require any and all subcontractors to keep records and accounts as may be necessary in order to record complete and correct entries as to personnel hours charged to this engagement, and any expenses for which CONTRACTOR expects to be reimbursed. Such books and records will be available at all reasonable times for examination and audit by CITY and shall be kept for a period of ten (10) years after the completion of all work to be performed pursuant to this Agreement. Incomplete or incorrect entries in such books and records will be grounds for disallowance by CITY of any fees or expenses based upon such entries. All records shall be maintained and available for disclosure, as appropriate, in accordance with Chapter 119, Florida Statutes.

27.4 **Assignments; Amendments.** This Agreement, and any interests herein, shall not be assigned, transferred or otherwise encumbered, under any circumstances, by CONTRACTOR without the prior written consent of CITY. For purposes of this Agreement, any change of ownership of CONTRACTOR shall constitute an assignment which requires CITY approval. However, this Agreement shall run to the benefit of CITY and its successors and assigns. It is further agreed that no modification, amendment, or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

27.5 **No Contingent Fees.** CONTRACTOR warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONTRACTOR to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for CONTRACTOR any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For the breach or violation of this provision, CITY shall have the right to terminate the Agreement without liability at its discretion, to deduct from the contract price, or otherwise recover the full amount of such fee, commission, percentage, gift or consideration.

27.6 **Notice.** Whenever any party desires to give notice unto any other party, it must be given by written notice, sent by certified United States mail, with return receipt requested, addressed to the party for whom it is intended and the remaining party, at the places last specified, and the places for



giving of notice shall remain such until they shall have been changed by written notice in compliance with the provisions of this section. For the present, CONTRACTOR and CITY designate the following as the respective places for giving of notice:

CITY Charles F. Dodge, City Manager
City of Pembroke Pines
601 City Center Way, 4th Floor
Pembroke Pines, Florida 33025
Telephone No. (954) 450-1040

Copy To: Samuel S. Goren, City Attorney
Goren, Cherof, Doody & Ezrol, P.A.
3099 East Commercial Boulevard, Suite 200
Fort Lauderdale, Florida 33308
Telephone No. (954) 771-4500
Facsimile No. (954) 771-4923

CONTRACTOR {--Primary Contact Name---}, {---Primary Contact Title---}
{--Company Name---}
{--Street1---}, {---Street2---}
{--City---}, {--State/Province---} ---Postal Code---
E-mail: {--E-mail---}
Telephone No: {--Phone---}
Cell phone No: {--Primary Contact Cell Phone Number---}
Facsimile No: {--Fax---}

27.7 **Binding Authority.** Each person signing this Agreement on behalf of either party individually warrants that he or she has full legal power to execute this Agreement on behalf of the party for whom he or she is signing, and to bind and obligate such party with respect to all provisions contained in this Agreement.

27.8 **Headings.** Headings herein are for the convenience of reference only and shall not be considered in any interpretation of this Agreement.

27.9 **Exhibits.** Each exhibit referred to in this Agreement forms an essential part of this Agreement. The exhibits, if not physically attached, should be treated as part of this Agreement and are incorporated herein by reference.

27.10 **Severability.** If any provision of this Agreement or application thereof to any person or situation shall to any extent, be held invalid or unenforceable, the remainder of this Agreement, and the application of such provisions to persons or situations other than those as to which it shall have been held invalid or unenforceable, shall not be affected thereby, and shall continue in full force and effect, and be enforced to the fullest extent permitted by law.



27.11 **Entire Agreement and Conflicts.** This Agreement is intended by the parties hereto to be final expression of this Agreement, and it constitutes the full and entire understanding between the parties with respect to the subject hereof, notwithstanding any representations, statements, or agreements to the contrary heretofore made. In the event of a conflict between this Agreement, Exhibit "A", and Exhibit "B", this Agreement shall prevail, followed by Exhibit "A", and then Exhibit "B".

27.12 **Waiver.** Failure of CITY to insist upon strict performance of any provision or condition of this Agreement, or to execute any right therein contained, shall not be construed as a waiver or relinquishment for the future of any such provision, condition, or right, but the same shall remain in full force and effect.

27.13 **Attorneys' Fees.** In the event that either party brings suit for enforcement of this Agreement, each party shall bear its own attorney's fees and court costs, except as otherwise provided under the indemnification provisions set forth herein above.

27.14 **Protection of CITY Property.** At all times during the performance of this Agreement, CONTRACTOR shall protect CITY's property from all damage whatsoever on account of the work being carried on under this Agreement.

27.15 **Counterparts and Execution.** This Agreement may be executed by hand or electronically in multiple originals or counterparts, each of which shall be deemed to be an original and together shall constitute one and the same agreement. Execution and delivery of this Agreement by the Parties shall be legally binding, valid and effective upon delivery of the executed documents to the other party through facsimile transmission, email, or other electronic delivery.

27.16 **Compliance with Statutes.** It shall be the CONTRACTOR's responsibility to be aware of and comply with all statutes, ordinances, rules, orders, regulations and requirements of all local, City, state, and federal agencies as applicable.

27.16.1 **Services to be Performed at CITY Schools.** CONTRACTOR shall comply with Chapter 1012, Florida Statutes, which requires Level II background screening for individuals whom are vendors performing services at a Florida public school or district, if applicable.

27.16.2 **Background Screening.** CONTRACTOR shall comply with all requirements of Sections 1012.32 and 1012.465, Florida Statutes, and for the purpose of on-site services, all of its personnel who are to be permitted access to school grounds when students are present, will successfully complete the background screening required by the referenced statutes and meet the standards established by the statutes. This background screening will be conducted by CONTRACTOR in advance of personnel providing any services under the conditions described in the previous sentence. CONTRACTOR respectively shall bear the cost of acquiring the background screening required by Section 1012.32, Florida Statutes, and any fee imposed by the Florida Department of Law Enforcement. The failure of CONTRACTOR to perform any of the duties described in this section shall constitute a material breach of Agreement. CONTRACTOR agrees to indemnify and hold harmless CITY, its elected and



appointed officials, officers, employees, and agents from any liability in the form of physical or mental injury, death, or property damage resulting from the CONTRACTOR's failure to comply with the requirements of this Section or with Sections 1012.32 and 1012.465, Florida Statutes.

SIGNATURE PAGE FOLLOWS



IN WITNESS OF THE FOREGOING, the Parties have set their hands and seals the day and year first written above.

CITY:

CITY OF PEMBROKE PINES, FLORIDA

APPROVED AS TO FORM:

BY: _____

Print Name: _____
OFFICE OF THE CITY ATTORNEY

MAYOR ANGELO CASTILLO

ATTEST:

BY: _____

CHARLES F. DODGE, CITY MANAGER

DEBRA E. ROGERS, CITY CLERK

CONTRACTOR:

{---Company Name---}

Signed By: _____

Printed Name: _____

Title: _____

1000 Ton Cooling Tower

General – RSCT1000F2

Nominal Cooling Tons – 1000¹

Number of Electrical Circuits – 1

Number of Cells – 2

Number of Fans/Cell – 8

1 – Nominal Cooling Tower Tons are determined at 3 GPM/Ton, 85/95 across tower at 78°F Wetbulb Temperature



Electrical Data – Circuit Breaker Style Disconnect(300 Amp)

Voltage – 480V 3 Phase

Frequency – 60Hz

Wire Connection Type – Series 16 Cam Type Only

SCCR – 65000A

Minimum Circuit Ampacity(MCA) – 180A

Maximum Overcurrent Protection(MOP) – 280A

Basin Heater Qty/FLA – (4) 9.63A Each

Fan Motor Qty/FLA – (16) 4.7 Each

Mechanical Data

Inlet Connection Qty/Size/Type – (2) 8" Victaulic

Outlet Connection Qty/Size/Type – (2) 10" Victaulic

Make-up Connection Qty/Size/Type – (2) 1 ½" FPT

Drain Connection Qty/Size/Type – (2) 2" FPT

Overflow Connection Qty/Size/Type – (2) 2" FPT

Drive Type – Direct Drive EC Fan

Maximum Inlet Water Temp – 130°F

Features

- Minimal Setup Required for Quick Installation/Startup
- Induced Draft Counterflow
- Complete Controls Package Included
- EC Fan Motors for Capacity Modulation
- Reinforced Fiberglass Construction w/ Permanently Bonded UV Protection
- Seamless Cold Water Basin
- Water Connections on both sides of tower
- (2) 8kW Basin Heaters
- Cells can run independently of each other or together
- Mechanical Float Make Up Water Valve

Dimension and Weights

Length	48' 4"
Width	8' 6"
Height	13' 6"
Shipping Weight w/ Trailer	30,000 lbs
	54,600 lbs
Operating Weight w/ Trailer	
Trailer Weight	10,100 lbs

Lifting Device : None – Not removable from trailer

Installed Clearances²

Front/Back – 6'

Sides – 5'

²Clearances assume three walls surround tower with one open end. See IOM for additional clearances while operating multiple towers in close proximity of each other.

Sound Data

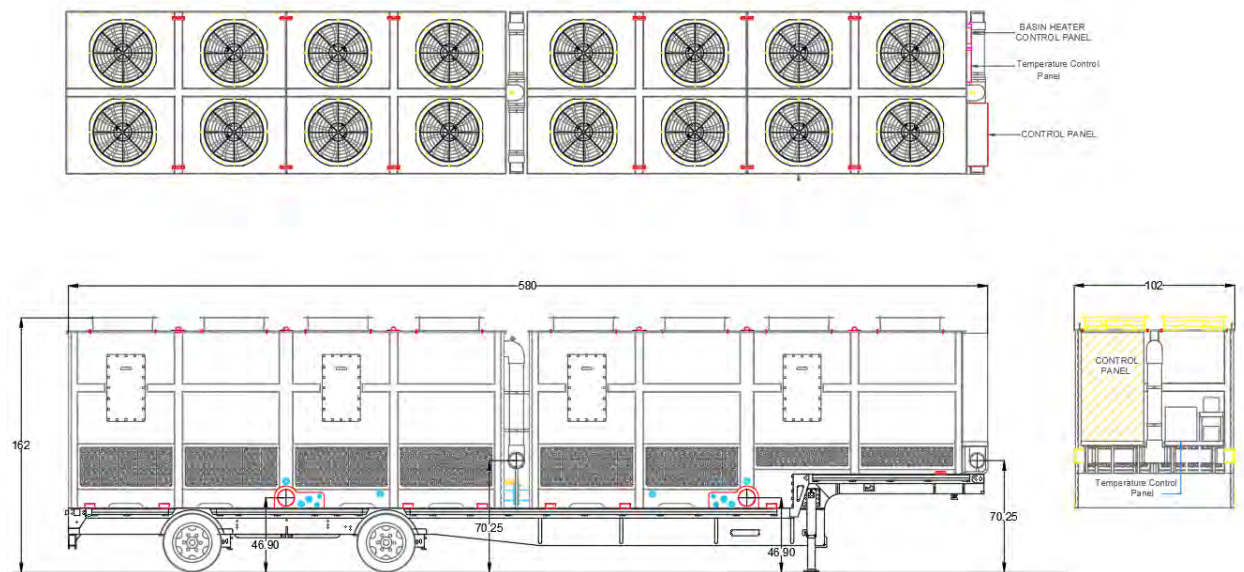
Free-Field S.P.L at 5 ft(dBA) – 75.9

Free-Field S.P.L at 30 ft(dBA) – 60.3

Free-Field S.P.L at 50 ft(dBA) – 55.9

Cooling Tower Capacity (GPM)								
Water Temperature		Wet Bulb Temperature (°F)						
In(°F)	Out(°F)	66	68	70	72	75	78	80
95	85			4599	4237	3650	3000	2481
103	85	3679	3483	3274	3052	2687	2273	1955
105	85	3735	3483	3302	3110	2904	2566	2180
120	90	3884	3699	3566	3426	3276	3031	2756
130	90	3341	3229	3110	2982	2771	2553	2354

Unit Drawings



PRODUCT DATA SHEET

Sikagard®-7600 VG

TWO-COMPONENT POLYURETHANE, TROWEL GRADE, BITUMEN MODIFIED WATERPROOFING MEMBRANE

PRODUCT DESCRIPTION

Sikagard® 7600 is a two-component, liquid applied, asphalt extended polyurethane sealer used in a waterproofing membrane system. The system is available in 2 grades. Sikagard® 7600 VG - trowel grade can be used for vertical and overhead applications.

USES

- Waterproofing
- Tank Liner
- Pond Liner
- Cooling Tower liner
- Potable Water Containment
- Reservoirs
- Traffic system base coat over asphalt surface

CHARACTERISTICS / ADVANTAGES

- Economical and easy to apply system
- Seamless system which bridges cracks and joints
- Impervious to water and aqueous chemicals
- Abrasion Resistant
- UV Stable

APPROVALS / STANDARDS

- Meets California VOC and AQMD Requirements, Including SCAQMD Areas
- ANSI / NSF 61 Approved for contact with Potable Water

PRODUCT INFORMATION

Packaging	Component A - 0.45 gal. pail Component B - 4.05 gal. pail
	1 Unit 4 x 4.5 gal. pail A+B
Appearance / Color	Component A: Transparent Component B: Black
Shelf Life	12 months from date of manufacture in original, factory-sealed containers
Storage Conditions	Store indoors at a temperature between 60–95 °F (15–35 °C)
Density	comp. B: 8 lbs/gal comp. A: 10.1 lbs/gal Mixed & Cured: 8.3 lbs/gal
Solid content by weight	95 ± 2 % (ASTM D-236)

TECHNICAL INFORMATION

Chemical Resistance	Resistance to aqueous chemicals and waste water. Please see chemical resistance chart.
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Behavior after Artificial Weathering		Weathering (ASTM D822) done for > 5000 hrs
Tensile Strength (ASTM D-412)	1000 psi ± 50 psi	5.86 Mpa ± 0.3 Mpa
Tear Strenght (Die C, ASTM D-624)	180 ± 50 pli	
Hardness (ASTM D-2240)	60 ± 5 Shore A	
Adhesion to Concrete (dry) Elcometer	350 psi	
Abrasion Resistance - Weight Loss (ASTM D4060)	1.2 mg loss	
Deflection Temperature (ASTM D648)	pass	
Elastomeric Waterproofing (ASTM C836)	exceeds	
(ASTM C957)	exceeds	
Extension to Break (ASTM D2859)	450 ± 100	
Liner Performance Crack Bridging	10 cycles @ - 15°F > 1/8"; After heat aging > 1/4"	
Liner Weight (60 mil wet film thickness)	30 lbs/100 sq.f.	
Mullen Burst Strenght (ASTM D751).....	50 mil 155 psi	
Recovery from 100% Extention after 5 minutes	98%	
after 24 hours	100%	
Softening Point, Ring & Ball (ASTM D36)	>400°F	
Deflection Temperature (ASTM D648)	-60°F	

Service Temperature -60–220 °F

APPLICATION INFORMATION

Pot Life	20 minutes (standard ambient conditions 70 F°, 50% humidity)
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APPLICATION INSTRUCTIONS

any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to application.

Concrete - New concrete must be cured a minimum of 28 days prior to application. Old concrete must be free of loose aggregate, dirt and be dry. New and old

concrete should be Shot-, Water- or Abrasive-blasted. Grease spots and oil should be chemically cleaned with appropriate cleaners or mechanically removed .

Asphalt - New asphalt must be cured a minimum of 28 days prior to application. Old asphalt must be free of loose aggregate, dirt and be dry. New and old asphalt should be Shot-, Water- or Abrasive-blasted. Lower ambient temperature will help to make cleaning process more effective. Grease spots and oil should be cleaned with appropriate cleaners or mechanically removed.

Metal - Should be thoroughly cleaned by grinding or blast cleaning. Be aware of dew point and check it before every application on metal surface.

Plywood - The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded.

Priming: To promote adhesion and minimize outgassing, priming is advised on all surfaces except for new plywood. New plywood priming is optional.

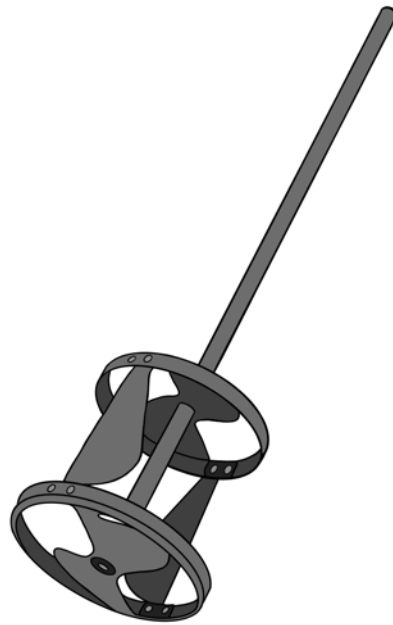
- **Concrete, Old Plywood** - Sikalastic® PF Lo-VOC Primer , Sikalastic® FTP Lo-VOC Primer , Sikalastic® MT Primer
- **Metal** - Sikalastic® PF Lo-VOC Primer, Sikalastic® EP Primer
- **Asphalt** - Sikalastic® Recoat Primer, Sikalastic® EP Primer

APPLICATION

Mixing

It is essential that proper mixing methods and tools are used to ensure proper application of Sikagard®-7600 VG.

- **Mixing Drill:** Mechanical Mixer (400-600 rpm)
- **Mixing Paddles:** Jiffy Style Paddle (5-50 Gallon Model) or Mud Mixing Paddle (9-5/8" WIDE x 6-1/4" DEEP)
- **Premixing:** Premix each pail of Sikagard®-7600 VG Part-B (4.05 gal.) by using a mechanical mixer with a jiffy style paddle or a mud mixing paddle at slow speed for a minimum of 1.5 minutes to ensure Sikagard®-7600 VG Part B is a homogeneous mixture in pail.
- **Mixing A & B component:** After premixing continue to mix Sikagard®-7600 VG Part B, slowly add one 0.45 gallon pail of Sikagard®-7600 VG Part-A to the vortex created while mixing Sikagard®-7600 VG Part B. Once Part-A has been added, mix continuously for 3 minutes.
- Take care not to allow entrapment of air into the material. Ensure mixed evenly including sides of pail. Do not mix in an aggressive up and down motion. Do not estimate mixing time to avoid any errors. Do not thin. Do not hand mix. Mix the whole pail. Do not batch down.



Top: Jiffy Style Paddle Bottom: Mud Mixing Paddle

Product Data Sheet

Sikagard®-7600 VG

January 2020, Version 01.04

020303020030000011

Phase 1 (Primer): When required; prime the surface at the rate of 1 gal / 200 - 300 sq.ft. . Apply using a brush or phenolic core roller. This will result in 5 - 7 dry mils of coating. Priming is optional. Don't prime over an existing detail coat.

NOTE: For rough or porous concrete or when outgassing is a concern, use Sikalastic® PF Lo-VOC Primer or Sikalastic FTP LoVOC Primer at an approximate rate of 180 - 230 sq.f/1 gal. This rate may vary on the porosity of the substrate. Allow primer to become tack free before proceeding to the next phase.

Phase 2 (Cracks, Joints, Detailing):

Detail Coat: Apply 30 mils of detail coat Sikagard® 7600 over all joints, transitions, cracks and flashing. Cracks in concrete/asphalt over 1/8" must be filled with Sikagard® 7600. Using Sikagard® 7600 as caulking compound will shorten the curing time over conventional polyurethane caulks.

Reinforced Detail Coat: Apply 15 mils of detail coat Sikagard® 7600 over all joints, cracks and flashing. Cracks in concrete/asphalt over 1/8" must be filled with Sikagard® 7600 . Bridge joints, cracks, and flashings with 3" or 6" FlexiTape Heavy pushing it into the Sikagard® 7600 over all joints, cracks and flashings. Over reinforcement tape, apply 10–15 mils stripe coat of Sikagard® 7600 and taper it onto adjacent surface. Allow the surface to cure for 4–6 hours before the next phase.

Phase 3 (Coat #1): The first coat of Sikagard® 7600 VG should be applied at the rate of 48 - 24 sq.f/1 gal. resulting in 30 - 60 dry mils of membrane . Allow to cure (4-6 hours) before proceeding to Phase 4.

Phase 4 (Coat #2): Apply the second coat of Sikagard® 7600 VG at the rate of 48 - 24 sq.ft./1gal. resulting in 30 - 60 dry mils of membrane.

NOTE: If priming is not required skip Phase 1, and proceed with Phase 2 . Any adhesion test is to be performed 3 days after product application.

Sikagard 7600 VG can be applied over vertical and overhead surface. Apply using a trowel. Please not that potlife for SG 7600 VG is only 20 minutes.

Recoat: At 75 °F (24 °C) and 50 % relative humidity, recoating and multiple or second coats must be completed within 16 hours of previous applications of Sikagard® 7600 VG . After this 16 hour window, it is necessary to abrade, clean and prime surface prior to recoating.

Reinforcement: please contact Sika Technical Service (polyester scrim is optional).

Removal: Equipment should be immediately cleaned with an environmentally safe solvent, as permitted under local regulations.

LIMITATIONS

- Surfaces must be dry, clean and free of foreign matter. Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.
- Cured Sikagard® 7600 VG may be placed in service within 24 hours for non-aggressive service and no potable water. Other service applications may require a cure time of a minimum 96 hours or more. Please contact Sika Technical Service for recommended application.
- This product is available only in black color. Can be exposed to direct sunlight. Initially after application it is shiny black than after few months it will turn dull after being exposed to direct sunlight.
- Observe the curing time before immersion into into and service in potable water. Please see Desinfection and cleaning guide.
- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Minimum ambient and substrate temperature during application and curing of material is 41 °F (5°C); maximum is 95 °F (35 °C). Surface temperatures must be no higher than 110 °F (43 °C).
- New concrete must be cured a minimum of 28 days prior to application .
- Do not store materials outdoors exposed to sunlight and moisture for prolonged periods.
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure. This condition should be checked using ASTM D-4263 (Polyethylene Sheet method).
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems.
- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature.
- If applied during rising temperature pin holing may occur.
- Do not apply when substrate is in direct sunlight.
- Precautions should be taken to prevent vapors and/or odors from entering the building/ structure, including but not limited to turning off and sealing air intake vents and through-wall air conditioners, and other means of vapor/odor ingress during application and cure. Please see Applying within Confined Spaces manual.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions). Surface irregularities may reflect through the cured system.
- When applying over existing coatings or membranes

Product Data Sheet

Sikagard®-7600 VG

January 2020, Version 01.04

020303020030000011

compatibility and adhesion testing, subsequent approval by Technical Services is required.

- Do not thin or part mix the material. Do not mix Sikagard® 7600 VG by hand; mechanically mix only.
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks, and lightweight insulating concrete overlays should not be covered with Sika membrane systems without additional deck evaluation to determine substrate moisture content and subsequent approval by Technical Services.
- If Sikagard 7600® VG is used as split slab waterproofing membrane or buried membrane cover the final coat of Sikagard 7600® with an approved drainage mat (Sika® Drain 420) or protection board.
- Application over asphalt as traffic coating Base Coat : Please contact Sika Technical Service . Always use Recoat primer.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA’s Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or

replacement of this product exclusive of any labor costs.
NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL
APPLY INCLUDING ANY WARRANTY OF
MERCHANTABILITY OR FITNESS FOR A PARTICULAR
PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL
THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.
SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS
PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT
OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD
BY OTHERS.

Sale of SIKA products are subject to the Terms and
Conditions of Sale which are available at
<https://usa.sika.com/en/group/SikaCorp/termsandconditions.html>
or by calling 1-800-933-7452.

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Product Data Sheet

Sikagard®-7600 VG
January 2020, Version 01.04
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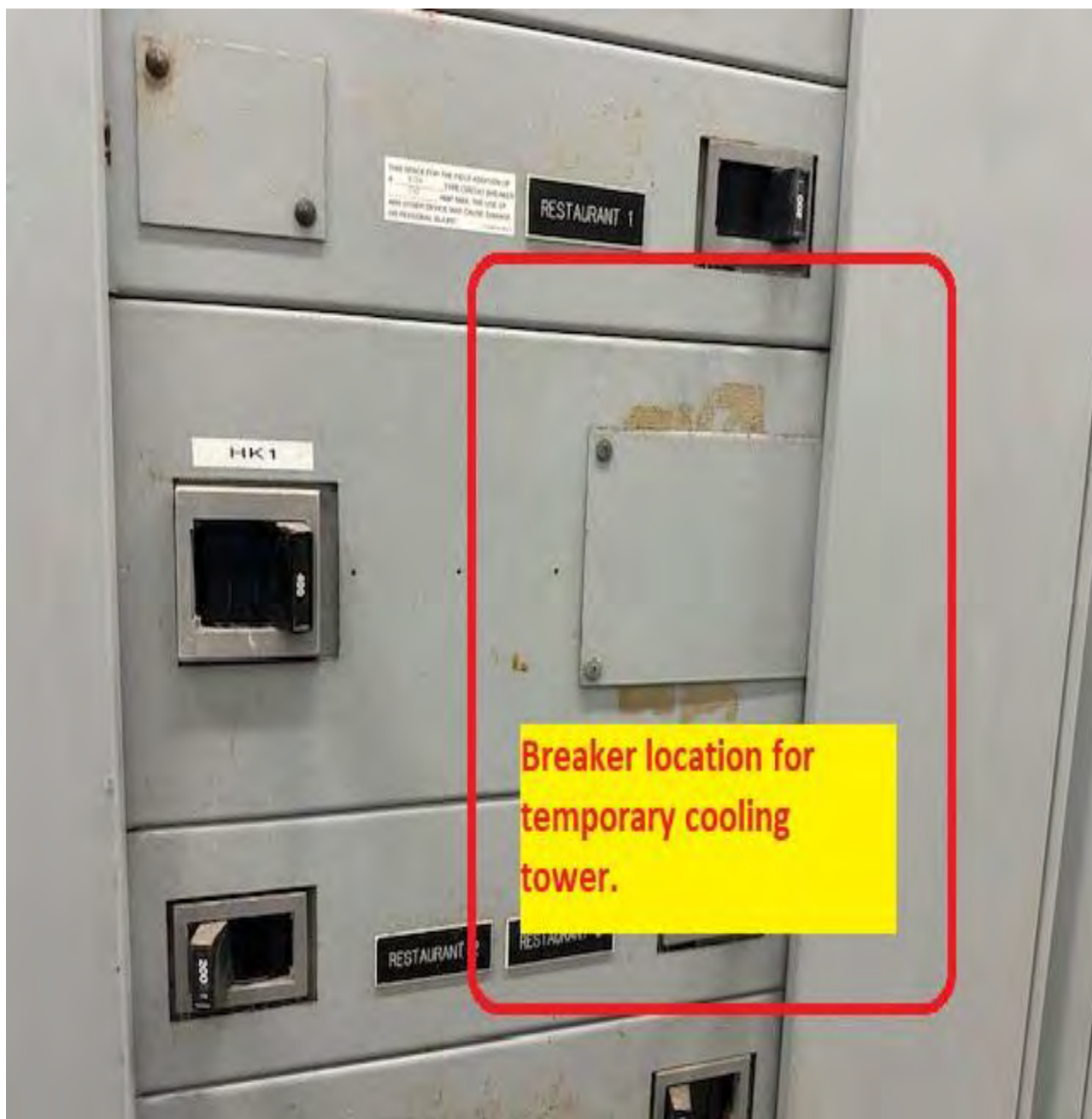
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Electric Room

1 1/2" Makeup Water Line





**Breaker location for
temporary cooling
tower.**



**2- 8" Connections for
temporary cooling tower.**

**Panel for temporary
electrical connection**





Submittal Data Package

Project:
Academic Village Cooling Tower Replacement

Customer:
Tom Barrow Co. - SFL

Representative:
Juan Gonzalez (NA - South)
✉ jgonzalez@tombarrow.com

Series 3000 Cooling Tower S3E-1222-06N-2/S

Background Information

BAC Quote Number:	90609	Line:	100
Revision:	2	Revision Name:	Revision 2
Purchase Order No:			

The submittal document is as configured by your Sales Representative as of the date 3/4/2025. Please note any future changes may require a revised submittal package and updated drawings.



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Cooling Tower

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Technical Datasheet

Cooling Tower

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Model Information

Product lineSeries 3000 Cooling Tower
Model.....S3E-1222-06N-2/S

Main Accessories

Intake option.....None
Discharge optionNone

Thermal Design Data

Requested capacity (unit)12,245.10 MBH
Maximum capacity (unit).....13,440.39 MBH
Reserve capacity9.54 %
Requested fluid flow1,750.00 gpm
Entering wet bulb temperature80.00 °F
Inlet temperature of process fluid99.00 °F
Outlet temperature of process fluid85.00 °F

Physical Data (per unit)

Overall length (not including all options and accessories).....23' 10"
Overall width (not including all options and accessories)21' 7"
Overall height (not including all options or accessories).....10' 11"
Shipping weight.....23,038 lbs
Operating weight.....47,598 lbs
Heaviest section11,519 lbs
Material optionJE PREMIER SERIES® Construction

Note: Exact unit dimensions and weights may be influenced by accessories/option combinations.

Wet Deck Surface

Wet deck surface materialPVC

Electrical Data (per unit)

Fan motor
Quantity.....2
BHP (net mech output power at motor shaft)50.0 HP
Fan motor power(2) 25.0 = 50.0 HP/Unit
Fan Drive SystemBALTIDRIVE® Power Train
Voltage230/460 V
Phase.....3 Phase
Frequency.....60 Hz
Protection classIP55
Efficiency class.....Premium Efficiency
Fan synchrone speed1,800
Frame sizeNEMA Frame 284T
Type1 Speed/1 Winding
EnclosureTEAO : Totally Enclosed Air Over/Airtight Motor

Aerodynamic Data (per unit)

Airflow (100% RPM/100% RPM)240,493 CFM
Number of fans2
Fan typeStandard Fan
Minimum distance required for single unit (For multiple units, refer to Layout Guidelines)
From solid wall with maximum air flow.....6.0 ft.
From 50% open wall with maximum air flow.....3.0 ft.

Energy Rating

USGPM/HP per ASHRAE 90.1 , ASHRAE 189 and CA Title 2464.98 USGPM/HP

Hydraulic Data (per unit)

Total pressure drop.....4.35 PSI
Static lift.....4.35 PSI

Special Requirement(s)

Notes:

- Thermal performance at design conditions and total standard fan motor power is CTI/ECC certified
- These unit dimensions do not account for any accessories. Please contact BAC for dimensions of units with accessories.
- Refer to unit print for detailed dimensions.

Our reference: 90609 100 / 2

Your reference: Academic Village Cooling Tower Replacement

- The values presented in this document are estimates only and are subject to change by BAC.



Sound Rating Cooling Tower

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Project Name: Academic Village Cooling Tower Replacement
Project City: WEST PALM BEACH
Project Country: United States

Model Information

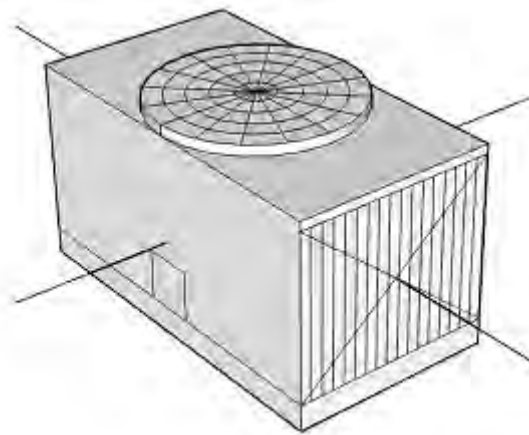
Product line: Series 3000 Cooling Tower
Model: S3E-1222-06N-2/S
Number of units: 1
Total pump motor power:
Total standard fan power: 100%, 50.0 HP/Unit
Fan type: Standard Fan
Fan motor: (2) 25.0 = 50.0 HP/Unit

Intake option: None
Discharge option: None

Octave band and A-weighted sound pressure levels (Lp) are expressed in decibels (dB) reference 0.0002 microbar. Sound power levels (Lw) are expressed in decibels (dB) reference one picowatt. Octave band 1 has a center frequency of 63 Hertz.

Air Inlet Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	84	71
2	86	70
3	84	72
4	78	68
5	71	63
6	65	55
7	60	49
8	57	45
A-wgtd	80	69

End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	79	72
2	79	67
3	77	68
4	70	63
5	66	58
6	58	49
7	51	44
8	49	39
A-wgtd	73	64



Top Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	87	77
2	88	77
3	86	77
4	83	71
5	80	66
6	74	62
7	70	57
8	69	54
A-wgtd	85	73

End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	79	72
2	79	67
3	77	68
4	70	63
5	66	58
6	58	49
7	51	44
8	49	39
A-wgtd	73	64

Air Inlet Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	84	71
2	86	70
3	84	72
4	78	68
5	71	63
6	65	55
7	60	49
8	57	45
A-wgtd	80	69

Sound Power (dB)		
Octave Band	Center Frequency (Hertz)	Lw
1	63	109
2	125	109
3	250	109
4	500	103
5	1000	98
6	2000	94
7	4000	89
8	8000	86
A-wgtd		105

Notes

- The use of VFDs can increase sound levels.
- The values presented in this document are estimates only and are subject to change by BAC.
- Sound rating is for a single unit.
- Sound data provided by 'ATC 128 (2019)' sound test code.
- Sound data is free field data valid for unit installation without elevation, not taking into account any reflections. Octave band values are shown for indicative purposes only. Values are obtained according to CTI ATC-128 (Test Code for Measurement of Sound From Water-Cooling Towers) for small towers.



Mechanical Specifications

Cooling Tower

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Background Information

Customer:	Tom Barrow Co. - SFL		
Project:	Academic Village Cooling Tower Replacement		
BAC Quote Number:	90609	Line:	100
Revision:	2	Revision Name:	Revision 2
Purchase Order No:			
Engineer:			

Model Information

Product line:	Series 3000 Cooling Tower
Model:	S3E-1222-06N-2/S
Quantity:	1
Knockdown For Field Assembly?	No

Mechanical Specifications

Unit Type	<p>Induced Draft, Crossflow Cooling Tower</p> <p>Factory fabricated, induced draft, crossflow cooling tower with vertical discharge.</p>
Quality Assurance	<p>Quality Assurance - ISO 9001 Compliant</p> <p>Each unit is manufactured under closely-controlled conditions using standardized parts to ensure each unit is built precisely to the same high-quality design and construction standards. The design, manufacture, and business processes of Baltimore Aircoil Company are ISO 9001 compliant.</p>
CTI Certification	<p>CTI Certified Thermal Performance</p> <p>The thermal performance of this BAC unit has been certified through performance tests conducted by the Cooling Technology Institute in accordance with their standard STD-201 RS. Your equipment may be selected for factory-testing to verify CTI certified performance. Such certification by an independent third party assures engineers and users that the published thermal capacities accurately reflect the actual unit performance. CTI certification eliminates the additional costs of on-site, individual unit testing, oversizing the equipment or operating cost penalties from deficient equipment.</p>
Materials of Construction	<p>JE PREMIER SERIES Construction</p> <p>All structural steel components are constructed from Type 304 stainless steel. All factory seams in the cold water basin will be welded to ensure watertight construction and shall be warranted against leaks for a period of five (5) years from date of shipment. Cold water basin includes a depressed section with drain/clean-out connection and the area under the fill sections is sloped toward the depressed section for easy cleaning. Hot water distribution basins are gravity type constructed of heavy gauge, Type 304 stainless steel. Polypropylene metering orifices are provided to assure even distribution of water over the wet deck surface. Heavy gauge, Type 304 stainless steel covers are furnished to prevent the accumulation of debris and algae in the hot water distribution basins.</p>
Fan & Drive System	<p>Standard Fan Driven by BALTIDRIVE® Power Train</p> <p>The fan is driven by a one-piece multi-groove, neoprene/polyester belt designed specifically for evaporative cooling equipment service. Motor is mounted on an adjustable motor base. Fan and motor sheaves are non-corrosive cast aluminum. The BALTIDRIVE® Power Train fan drive system, including fan motor, is warranted against defects in materials and workmanship for five (5) years from date of shipment. Fan and steel fan shaft are supported by heavy-duty, self-aligning, grease-packed, relubricatable ball bearings with special seals for protection against dust and moisture. All bearings are designed for minimum L10 life of 80,000 hours (280,000 hours average life).</p>
Fan Guard	<p>Stainless Steel Fan Guard</p> <p>A heavy gauge Type 304 stainless steel wire fan guard is provided over the fan cylinder.</p>

Our reference: 90609 100 / 2
Your reference: Academic Village Cooling Tower Replacement

www.BaltimoreAircoil.com

Casing Panels	<p>Fiberglass Reinforced Polyester (FRP) Casing Panels</p> <p>Casing panels are constructed of fiberglass-reinforced polyester (FRP), UV Protected panels. Hinged access doors are provided on both side walls of the tower for access to eliminators and fan plenum section for all cells. The doors are made of a steel frame matching the unit construction, with an exterior overlay of FRP.</p>
Inlet Louvers	<p>FRP Air Inlet Louvers</p> <p>Air inlet louvers are wave-formed, fiberglass-reinforced polyester (FRP), spaced to minimize air resistance and prevent water splash-out.</p>
Fill	<p>PVC Fill & Drift Eliminators</p> <p>The BACross® Fill and integral drift eliminators are formed from self-extinguishing (per ASTM D-568) polyvinyl chloride (PVC), having a flame spread rating of 5 per ASTM Standard E84-77a, and are impervious to rot, decay, and fungus or biological attack. The fill is elevated above the cold water basin floor to facilitate cleaning. This fill is suitable for a maximum entering water temperature of 130°F (54.44°C). The eliminators are designed to effectively strip entrained moisture from the leaving airstream with a minimum of air resistance.</p>
Equipment Structure	<p>Upgraded Structure Designed in accordance with the IBC and ASCE/SEI 7</p> <p>The upgraded structure of this product has been designed and analyzed in accordance with the wind and seismic load requirements of the 2006 IBC, 2009 IBC, 2012 IBC, 2015 IBC, ASCE/SEI 7-05, and ASCE/SEI 7-10. Seismic qualification is based on analysis. For more information and specific wind and seismic load capacity ratings, please see the Certificate of Wind and Seismic Load Capacity.</p>
Water Inlet(s)	<p>End Inlet EASY CONNECT® Piping Arrangement</p> <p>Inlet water enters the EASY CONNECT® Piping Arrangement located on the end of the cell(s). Please see the submittal package for the connection type, size and location. The EASY CONNECT® Piping Arrangement balances the flow to each side of the tower and includes a plugged blow-down connection to permit purging of dirt and debris. Polyvinyl chloride (PVC) piping connects EASY CONNECT® Piping Arrangement Chamber to the hot water distribution basins.</p>
Water Outlet(s)	<p>End Outlet Pump Suction Connection</p> <p>A pipe stub connection(s) of a metal compatible with the cold water basin material and appropriately sized for design flow is provided. Please see the submittal package for the connection type, size and location. Also included is a large area, lift out strainer which matches the cold water basin material of construction and has perforated openings sized smaller than the water distribution nozzle orifices. Strainer includes anti-vortexing baffle to prevent air entrainment.</p>
Flume Box Options	<p>Less Flume Box</p> <p>The unit(s) are provided less flume box.</p>
Basin Water Level Control	<p>Mechanical Float Valves for Independent Cell Operation</p> <p>Each cell is provided with one make-up valve with unsinkable polystyrene filled plastic float arranged for easy adjustment. The make-up valve is suitable for water supply pressures between 15 psig (103 kPa) and 50 psig (345 kPa).</p>
Penn F63 Float Switch	<p>Penn F63 Float Switch</p> <p>The Single-Pole, Double-Throw (SPDT) Liquid Level Float Switch is provided in the cold water basin of the unit. When the level in the basin rises above or falls below the required level, the switch will close one circuit and open a second circuit.</p>
Vibration Cutout Switch	<p>Mechanical Vibration Cutout Switch with Alarm Contact</p> <p>Fan system is provided with a vibration cutout switch to limit damage to the unit in the event of a high vibration condition. The vibration switch, including external alarm capability, is mechanically tripped with a frequency range of 0 to 3,600 RPM and trip point of 0.2 to 2.0 g's. Switch rating is 10 amperes at a maximum 480 VAC, and 1/4 ampere at 250 Vdc. The remote reset and bypass time delay on start-up solenoid coil is powered by 110 Vac. Field wiring is by others.</p>
Internal Access Option	<p>Internal Walkway</p> <p>A G-235 (Z700 metric) galvanized steel walkway complying with OSHA standards and regulations provides access to the plenum to facilitate servicing the unit. Walkway submerged mounting supports match the cold water basin material of construction.</p>

Special Requirement(s)



Terms and Conditions of Sale

Cooling Tower

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Baltimore Aircoil Company, Inc. Terms and Conditions of Sale

Pricing: Prices set forth in Seller's quotation shall remain firm for thirty (30) days. Within such period, the quotation shall convert into an order provided that all of the following have occurred: (1) Buyer submits either a purchase order or a copy of Seller's quotation displaying an authorized signature of Buyer within that thirty (30)-day period; (2) Buyer provides a release for fabrication; and (3) Buyer requests a shipment date that is no later than twelve (12) weeks from the date of Buyer's submission of a purchase order or signed quotation. In the event Buyer's requested shipment date is later than twelve (12) weeks beyond such submission date, Seller's price in effect twelve (12) weeks prior to such shipment date shall apply. In the event that Buyer requests for its convenience that Seller delay delivery of products subject to an order beyond the scheduled shipment date, pricing shall be subject to the same adjustment.

Payments: Terms of payment shall be net cash in thirty (30) days from date of invoice, subject to Seller's prior credit approval. If the Buyer shall fail to make any payments in accordance with the terms and conditions of sale, the Seller, in addition to its other rights and remedies but not in limitation thereof, may, at its option, without prior notice, cancel this order as to any undelivered products or defer shipments or deliveries hereunder, or under any other agreement between Buyer and Seller, except upon Seller's receipt of cash before shipment or such security as Seller considers satisfactory. Seller reserves the right to impose an interest charge (not exceeding the lawful maximum) on the balance of each invoice not paid on its due date for the period from the due date to the date of receipt of payment by Seller. In the event Buyer's failure to make timely payments to Seller results in Seller incurring additional costs, including but not limited to collection expenses and attorneys' fees, said costs shall be added to the amount due Seller from Buyer. Buyer shall have no right to any discount or retainage and shall not withhold payment as a set-off on Seller's invoice in any amount.

Taxes: Unless listed on the front (reverse) side of this document, prices do not include any federal, state or local sales, use or value-added taxes payable in connection with this order. All such taxes shall be paid by Buyer. Buyer shall indemnify Seller from and against such taxes, plus interest and penalties thereon, including, but not limited to, tax, interest and penalties resulting from a failure to collect such taxes because of Seller's reliance upon an invalid exemption certificate provided to Seller.

Allocation of Risk: Deliveries shall be considered made Ex-works BAC Factory. At such time, title to the goods and all risk of loss, or damage shall pass to Buyer.

Force Majeure: Seller shall under no circumstances be liable for any loss or damage resulting from delay or failure in the performance of its obligations under this contract to the extent that such performance is delayed or prevented by: fires, floods, war, terrorist activities, riots, strikes, freight embargoes or transportation delays, shortage of labor, inability to secure fuel, material, supplies or power at current prices, or on account of shortages thereof; acts of God or of the public enemy; any existing or future laws or acts of the federal, state or local government (including specifically, but not exclusively, any orders, rules or regulations issued by any official or agency of any such government) affecting the conduct of Seller's business with which Seller in its judgment and discretion deems it advisable to comply as a legal or patriotic duty, or to any case beyond the Seller's reasonable control.

Warranties: Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of five (5) years from date of shipment: fans, fan shafts, fan motors, bearings, sheaves, gearboxes, driveshafts, couplings, and mechanical equipment support. Exceptions and details of option-specific warranties follow:

- **TrilliumSeries® Adiabatic Condenser and Cooler** Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twenty-four (24) months from the date of equipment startup or thirty (30) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of two (2) years from date of shipment: fans and fan motors. The sump and drain pans are warranted against leaks for a period of two (2) years from the date of shipment. Only leaks from the factory seams of the cold-water basin are covered; this warranty does not apply to sump field connections, field-installed options, or modifications by others. Seller does not warrant in any form parts that are considered to be consumable such as Adiabatic® Pre-Cooler Pads.
- **TrilliumSeries® Dry Coolers** Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first. The following original equipment components only are warranted against defects in materials and workmanship for a period of five (5) years from date of shipment: fans, fan shafts, fan motors, bearings, sheaves, and mechanical equipment support. This warranty does not apply to field-installed modifications by others. Seller does not warrant in any form parts that are considered to be consumable.
- **JE Premier Series® Construction** is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment.
- **EVERTOUGH™ Construction** is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment excluding heat transfer coils which are warranted to be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first.
- **TriArmor® Corrosion Protection System** Cold Water Basins are warranted against leaks and corrosion for a period of ten (10) years from date of shipment. For the purposes of this warranty, "corrosion" means red rust formation on the interior of the cold water basin panels due to a failure of the TriArmor Corrosion Protection System. The leak or corrosion must be caused by a defect in the application of the TriArmor Corrosion Protection System. This warranty does not apply to cold water basin field connections, field installed options or modifications by others.
- **Welded 304 Stainless Steel** Cold Water Basins are warranted against leaks for a period of five (5) years from date of shipment. Only leaks from the factory seams of the cold water basin are covered; this warranty does not apply to cold water basin field connections, field installed options or modifications by others.
- **ENDURADRIVE® Fan System** motor is warranted to be free from defects in material and workmanship for a period of seven (7) years from date of shipment with factory authorized start up or five (5) years without factory authorized start up. The ENDURADRIVE Fan System variable frequency drive is warranted to be free from defects in material and workmanship for a period of five (5) years from date of shipment with factory authorized start up or one (1) year without factory authorized start up.
- **BAC Refrigeration Controls** are warranted to be free from defects in material and workmanship for a period of three (3) years from date of shipment with factory authorized start up or two (2) years without factory authorized start up.
- **Replacement Parts** provided by Seller under its original equipment warranty obligations are warranted against defects in materials and workmanship for a period of twelve (12) months from date of shipment or until expiration of their original warranty, whichever occurs first. Parts purchased after expiration of the original equipment warranty are warranted against defects in materials and workmanship for a period of twelve (12) months from date of shipment.
- **Original Equipment Fan Motors** are warranted against defects in materials and workmanship for a period of seven (7) years from date of shipment when space heaters are field-wired at time of initial installation per the motor nameplate.

Written notice of any defect shall be given to Seller immediately upon discovery by Buyer, and shall fully describe the claimed defect. Defective parts shall be repaired or replaced F.O.B. point of shipment, provided that inspection by Seller verifies the claimed defect(s). This shall be Buyer's exclusive remedy. **This warranty does not cover the costs of removing, shipping or reinstalling the equipment. Repairs made without the prior written approval of Seller shall void all warranties covering material and workmanship.** Any descriptions of the product(s) in the contract are for the sole purpose of identification and do not constitute a warranty. In the interest of product improvement, Seller reserves the right to change specifications and product design without incurring any liability therefore. The foregoing express warranties or those set forth elsewhere on this document are the only warranties of Seller applicable to the product(s) sold under this contract. **All other warranties, whether verbal or written, and all warranties implied by law, including any** warranties of merchantability or fitness for a particular purpose, are hereby excluded. Failure on the part of Buyer or of other parties to properly maintain the product(s) sold under this contract, or the operation of such product(s), by Buyer and/or other parties under conditions more severe than those for which such product(s) were designed, shall void all warranties covering materials and workmanship. Seller's warranties do not apply to defects in product(s) for which payment in full has not been received by Seller, and said warranties do not cover normal wear and tear or the erosion, corrosion and/or deterioration of the product(s) from unusual causes. No warranties by Seller shall apply to accessories manufactured by others, inasmuch as they are warranted separately by their respective manufacturers, except as stated above. Buyer assumes liability for and shall bear the costs of compliance with all laws, regulations, codes standards or ordinances applicable to the location, operation and maintenance of the product(s) sold under this contract, including those requirements pertaining to the distances between such product(s) and air-conditioning system duct intakes. No representative or agent of Seller is authorized to enlarge upon the express warranties of Seller.

Cancellation/Changes/Returns: Cancellation of or changes in any order by Buyer shall not be effective without Buyer's notice thereof received, agreed to, and confirmed in writing by Seller. If Seller, in its absolute discretion, approves Buyer's cancellation of an order, Buyer agrees to pay a reasonable cancellation charge. Seller's prior written consent must be obtained before Buyer returns any products, and when so returned will be subject to a handling charge and transportation costs payable by Buyer.

Liability/Indemnification: Seller shall not be liable for any damages caused by delay in delivery of the products. Buyer shall hold harmless and indemnify Seller from and against all liability, claims, losses, damages, and expenses (including attorneys' fees) for personal injury and property damage arising out of Buyer's improper unloading, handling, or use of the products subject to this order, and for Buyer's infringement of another's property rights. The Seller's maximum liability from any causes whatsoever, whether in breach of contract, tort (including negligence), strict liability, or otherwise, shall not exceed the contract price. Neither Buyer nor Seller shall in any event be liable to the other, whether such liability arises out of breach of contract, tort (including negligence), strict liability or any other cause or form of action, for any consequential, special, indirect or incidental damages, including but not limited to loss of actual or anticipated profits or loss of use arising out of this contract, other than such damages resulting from the willful misconduct of Buyer or Seller.

Storage: In the event that Buyer is unable to accept delivery of goods and the Seller is required to hold goods beyond two (2) working days from fabrication completion, a storage fee equal to the greater of \$200/day or 0.20% of the total order value/day will be assessed by Seller for every day beyond two (2) working days from fabrication date which it is required to store goods on behalf of Buyer. Storage will be assessed monthly and will need to be paid in full prior to a new shipment date being scheduled.

Government Contracts: If Buyer's purchase order is for products to be used in the performance of a U.S. Government contract, those clauses of applicable procurement regulations mandatorily required by federal law to be included in U.S. Government subcontracts shall be incorporated herein by reference.

Export Transactions: Buyer shall comply with all applicable export laws and regulations of the U.S. Government, and shall hold harmless and indemnify Seller from and against all liability, damages, and expenses (including attorneys' fees) incurred by Seller as a result of Buyer's violation of any U.S. Government export and/or international antiboycott laws or regulations. Buyer certifies that it will be the recipient of the products to be delivered by seller. Buyer acknowledges that products are subject to export/import control laws of various countries, including the Export Administration Regulations of the United States. Products sold by seller cannot be transferred, sold or re-exported to any party on the Entity List or Restricted Persons list of the

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Your reference: Academic Village Cooling Tower Replacement

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US Department of Commerce Bureau of Industry and Security, any party designated by the US Treasury Department Office of Foreign Asset Control and any party debarred or sanctioned for proliferation or terrorism reasons by the US State Department.

Agreement of Sale: Buyer's order is accepted on the terms and conditions stated herein and Seller's acceptance of Buyer's order is expressly made conditional upon Buyer's assent to such terms and conditions, including any of Seller's terms and conditions which may be additional to or different from those contained in Buyer's purchase order or otherwise. Such assent shall be deemed to have been given unless written notice of objection to any such terms and conditions (including inconsistencies between Buyer's purchase order and this acceptance) is given by Buyer to Seller promptly upon receipt of this acknowledgment. Any agreement or understanding, oral or written, which modifies or waives the terms and conditions herein (whether contained in Buyer's purchase order or other documentation) shall be deemed material and shall be rejected unless hereafter agreed to in writing and signed by Seller's authorized officer. Waiver by Seller of any breach or default hereunder shall not be deemed a waiver by Seller of any other or subsequent breach or default which may thereafter occur. Neither the rights nor the obligations of either Buyer or Seller are assignable without the prior written consent of the other party. This agreement of sale and all rights and obligations of Buyer and Seller shall be governed by and construed in accordance with the laws of the State of Maryland.

An electronic copy of the latest version is available online at www.baltimoreaircoil.com/terms.

(Revised –

8/23/2024)



Submittal Data

Cooling Tower

Page: 11 of 23
Date: 3/4/2025

Background Information

Customer: Tom Barrow Co. - SFL
Project: Academic Village Cooling Tower Replacement
BAC Quote Number: 90609 **Line:** 100
Revision: 2 **Revision Name:** Revision 2
Purchase Order No:
Representative: Juan Gonzalez (NA - South)
✉ jgonzalez@tombarrow.com

MODEL INFORMATION

Product line: Series 3000 Cooling Tower
Model: S3E-1222-06N-2/S
Quantity: 1

Certified Capacity Per Unit:

Maximum capacity (unit):	13,440.39 MBH
Water Flow Rate per Unit (GPM):	1,750.00 gpm
Entering Water Temp (°F):	99.00 °F
Entering Wet Bulb Temp (°F):	80.00 °F
Leaving Water Temperature (°F):	85.00 °F

Fan Motor(s):

Enclosure:	TEAO : Totally Enclosed Air Over/Airtight Motor
Fan Drive System:	BALTIDRIVE® Power Train
Total standard fan power:	100%, 50.0 HP/Unit
Fan motor:	(2) 25.0 = 50.0 HP/Unit
Voltage:	230/460 V
Frequency:	60 Hz
Phase:	3 Phase
Type:	1 Speed/1 Winding
Quantity:	1
Horsepower Motor A:	25.0 HP
Fan Motor Options A:	Space Heater
Add Shaft Grounding Ring?:	No

Execution:

Notes:

Drawings And Diagrams			
Drawing Type		Drawing Number	
Unit Print.....		UP-90609-100	
Unit Support.....		SS-90609-100	
Center of Gravity		CG-90609-100	
Basin Accessories.....		BA-90609-100	
Motor Location		ML-90609-100	
Drawing Type		Drawing Number	
Space Heater Wiring		SW-90609-100	
VCOS Location.....		VL-90609-100	
VCOS Wiring.....		VW-90609-100	
Internal Access		IA-90609-100	
IBC Certificate.....		IC-90609-100	



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DWG Version 1.0

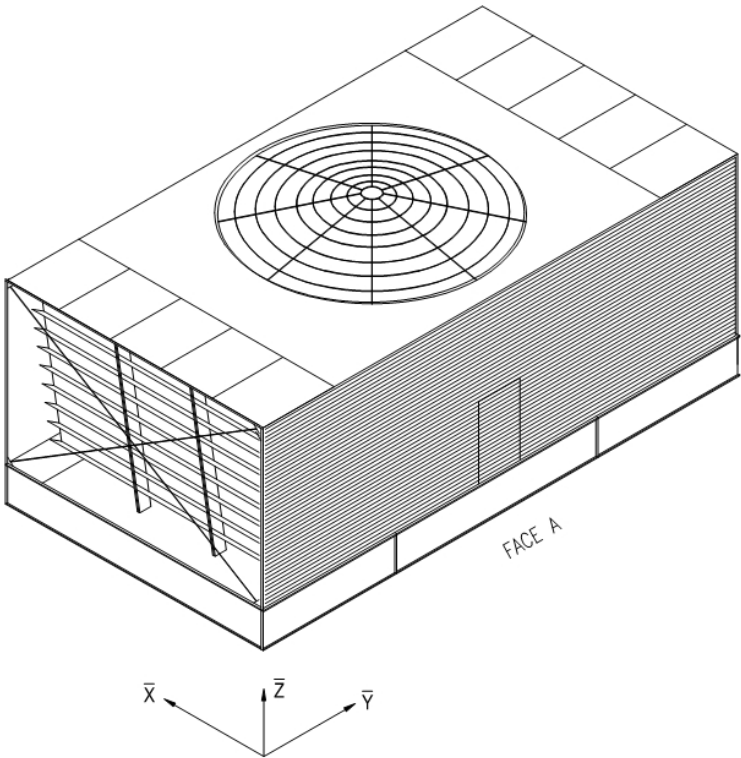
UNIT CENTER OF GRAVITY

\bar{X}		\bar{Y}		\bar{Z}	
DRY	OPERATING	DRY	OPERATING	DRY	OPERATING
6'-3 3/4"	6'-0 3/4"	10'-10 1/2"	10'-9 1/2"	4'-10"	3'-11"

WEIGHT BREAKDOWN FOR
FIELD INSTALLED ACCESSORIES

- VELOCITY RECOVERY STACK (EACH): N/A
- INTAKE ATTENUATION (EACH): N/A
- DISCHARGE ATTENUATION (PER CELL): N/A
- FAN COWL EXTENSIONS (EACH): N/A
- LOUVER FACE PLATFORMS (EACH): N/A
- ACCESS DOOR PLATFORMS (EACH): N/A
- EXTERNAL MOTOR PLATFORMS (EACH): N/A
- FAN DECK EXTENSION (EACH): N/A
- FAN DECK HANDRAILS (TOTAL): N/A

Notes
1) Drawings are not to scale.
2) Accessory weights shown above are included in the total unit Operating, Shipping and Heaviest Section values located on the Unit Print and Unit Support drawings. Ladder and cage weights are not shown above but are included in the totals.
3) These accessories ship loose for field assembly and installation.



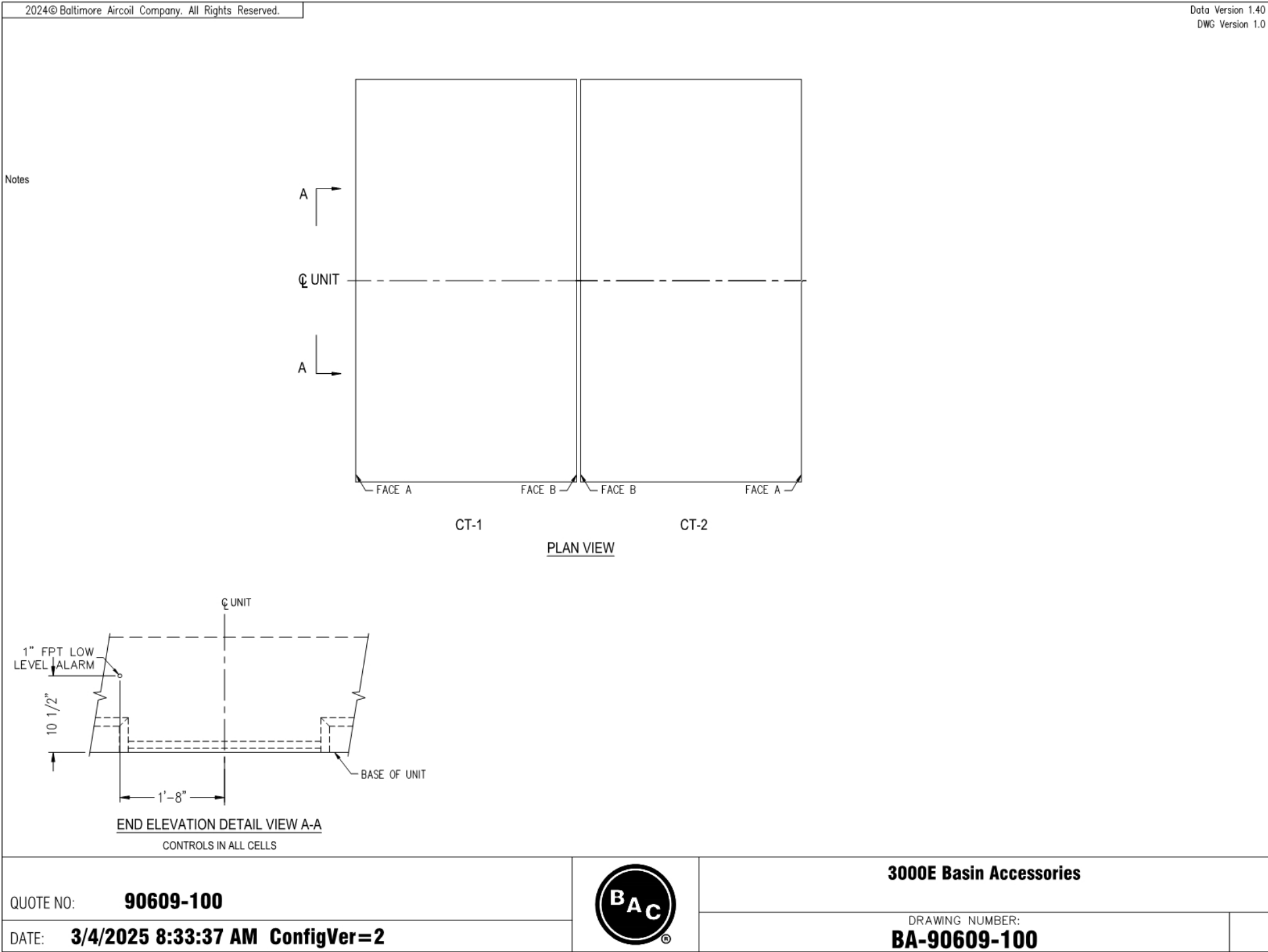
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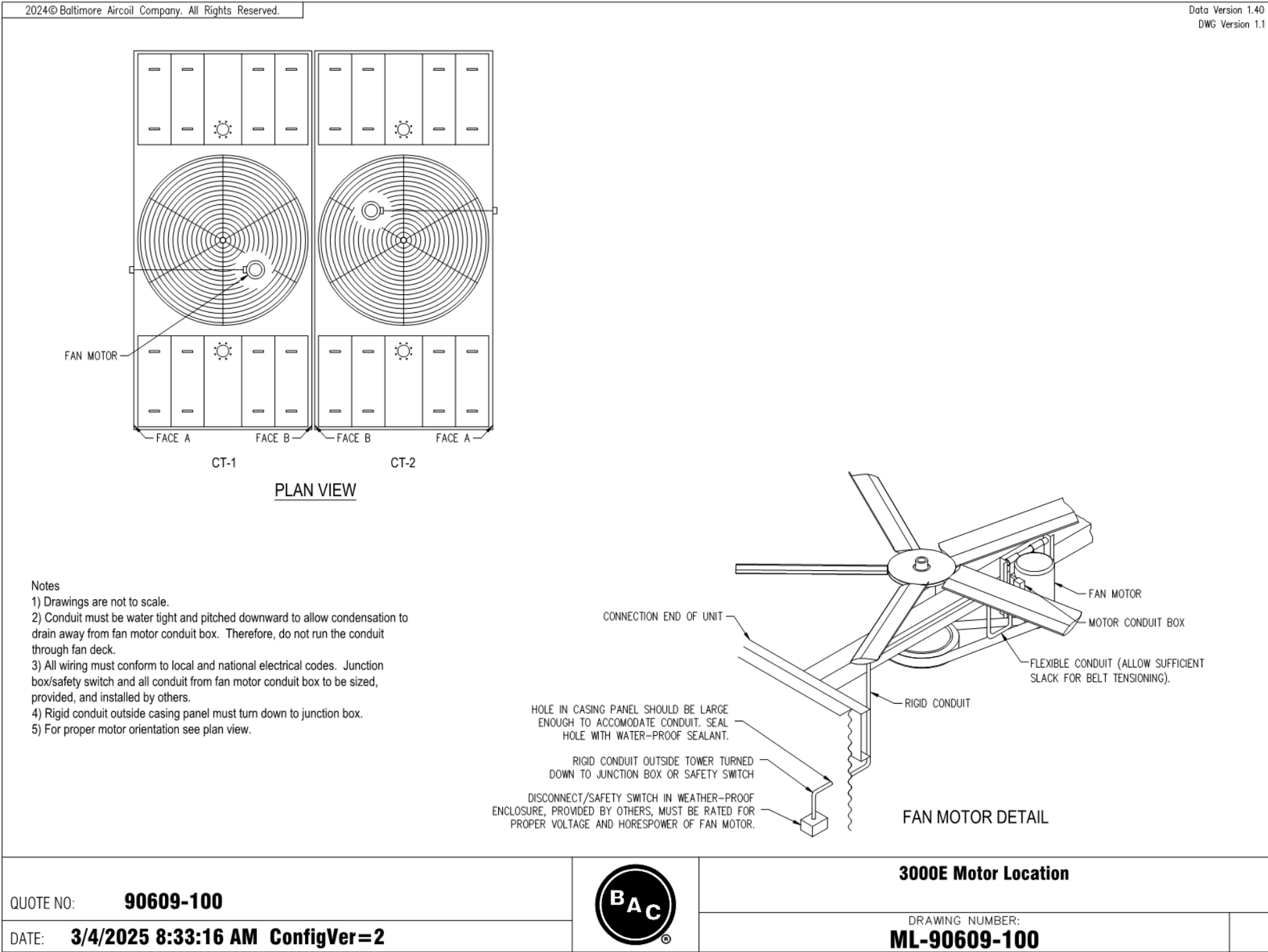
3000E Center of Gravity

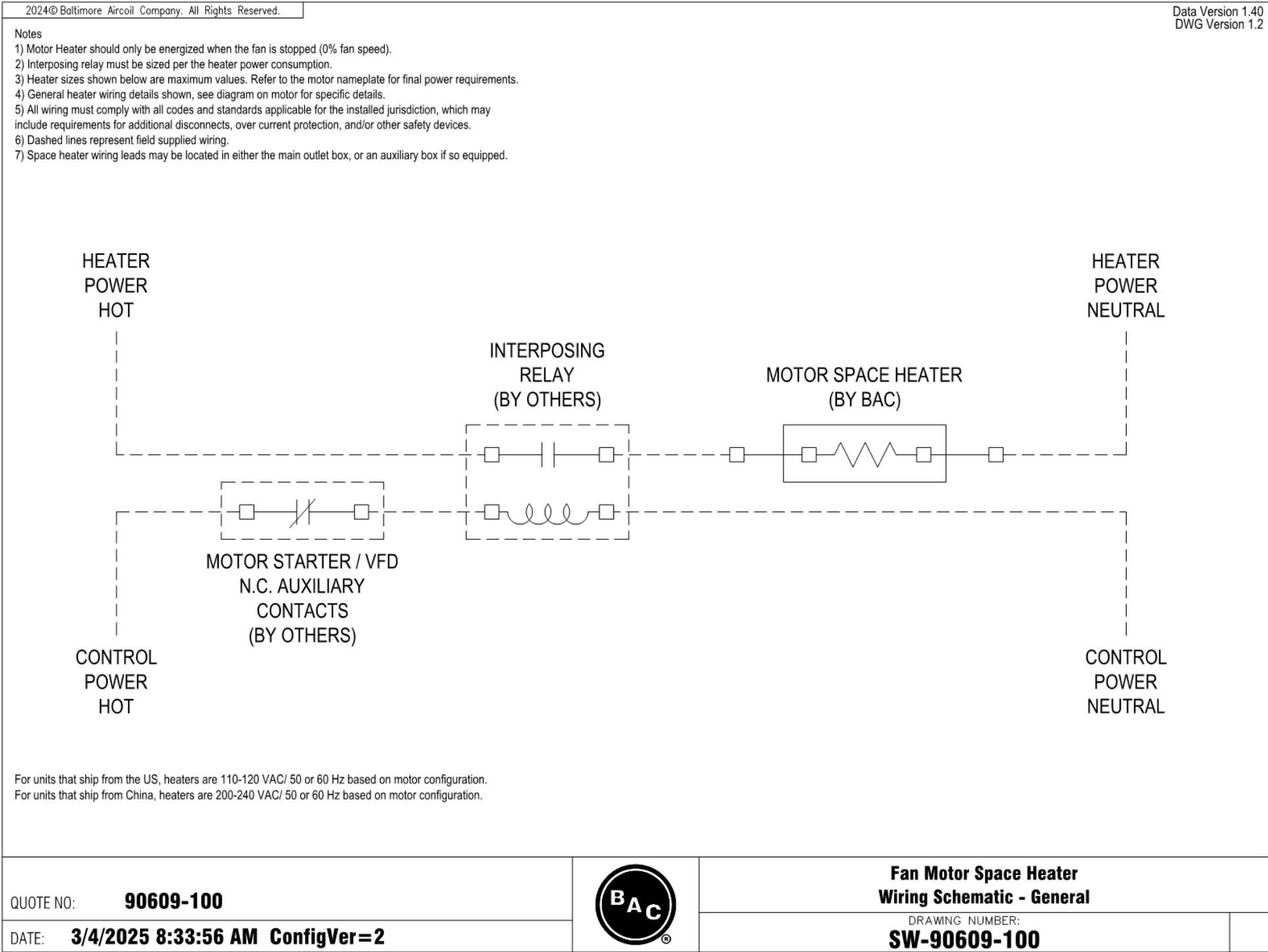
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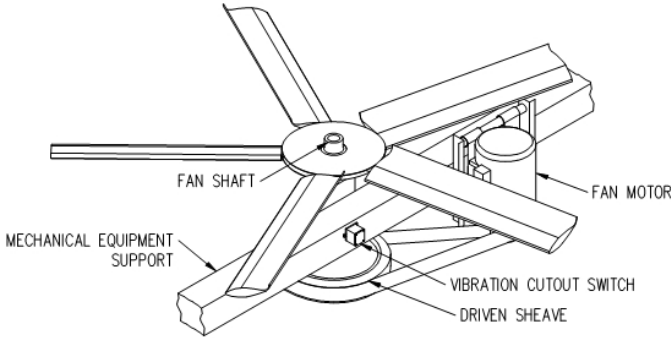



Motor Location







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<p>OPERATING INSTRUCTIONS</p> <p>Follow the installation drawings and wiring diagram to ensure the proper operation of the vibration switch. Direct any questions to your local BAC Representative.</p> <p>NOTE</p> <p>Moisture inside the switch can lead to switch failure. Care must be taken when replacing the cover on the vibration switch to ensure that the proper watertight seal is obtained.</p> <p>CAUTION</p> <p>Before performing any maintenance, adjustment or inspection of the switch, make certain that all power has been disconnected and locked in the off position.</p>		<p>SWITCH LOCATION Belt Drive Units</p> 	
QUOTE NO:	90609-100		VCOS Location
DATE:	3/4/2025 8:34:59 AM ConfigVer=2		DRAWING NUMBER: VL-90609-100



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NOTES:

1. LOCAL PUSH BUTTON RESET.

2. TO MAINTAIN HAZARDOUS DUTY RATINGS, THE FACTORY INSTALLED WATER TIGHT CONNECTION FITTINGS MUST BE REMOVED AND THE NINE CONDUCTOR CABLE MUST BE ROUTED INSIDE OF A SUITABLE EXPLOSION PROOF CONDUIT. NOTE: THE CONNECTORS CAN EASILY BE REMOVED WITHOUT HAVING TO UN-WIRE THE CONDUCTORS FROM INSIDE THE CUTOUT SWITCH.

3. THE MECHANICAL VIBRATION CUTOUT SWITCH COMES WITH TWO WATER TIGHT CONDUIT/CABLE CONNECTORS. ONE CONNECTOR IS USED TO PROVIDE A WATER TIGHT CONNECTION TO THE VIBRATION CUTOUT SWITCH AND THE OTHER IS PROVIDED FOR THE ELECTRICIAN TO CONNECT THE WIRE CABLE TO A JUNCTION BOX LOCATED IN THE VICINITY OF THE VIBRATION CUTOUT SWITCH.

4. THE SWITCHES IN THE NORMALLY CLOSED CIRCUITS (BLACK WIRE FOR SW-1 AND YELLOW WIRE FOR SW-2) WILL OPEN WHEN THE DEVICE EXPERIENCES VIBRATION LEVELS ABOVE THE SETPOINT VALUE. IF REVERSE CONTROL LOGIC IS DESIRED, CUT OFF BUTT END CONNECTORS ON WHITE AND/OR BROWN WIRES AND THEN INSTALL WIRE NUT OR BUTT CONNECTOR ON NORMALLY CLOSED WIRES (BLACK AND/OR YELLOW).

5. THIS MECHANICAL VIBRATION CUTOUT SWITCH COMES WITH TWO SINGLE POLE DOUBLE THROW SWITCHES. BOTH SWITCH CONTACTS ARE "DRY CONTACTS" WHICH CAN BE SUCCESSFULLY USED DIRECTLY IN THE FAN STARTER CONTROL CIRCUIT (TYPICALLY A/C VOLTAGE) CIRCUIT OR IN A BUILDING MANAGEMENT SYSTEM (TYPICALLY D/C VOLTAGE). CONTACT RATINGS: 3 AMPS@ 125 OR 480 VAC, 1/2 AMP@ 125 VDC, 1/4 AMP@ 250 VDC.

6. **CAUTION:** MOISTURE INSIDE THE SWITCH CAN LEAD TO SWITCH FAILURE. CARE MUST BE TAKEN WHEN REPLACING THE COVER ON THE VIBRATION SWITCH TO ENSURE THAT THE PROPER WATERTIGHT SEAL IS OBTAINED.

ADJUSTMENTS OF BAC MECHANICAL VIBRATION CUTOUT SWITCH

BAC RECOMMENDS THAT EACH VIBRATION CUTOFF SWITCH BE FIELD ADJUSTED AT START-UP TO OPTIMIZE THE TRIP POINT RELATIVE TO THE FINAL MOUNTING POSITION AND VIBRATION CHARACTERISTICS OF THE INSTALLED EQUIPMENT.

NOTE: INSTALLATION AND ADJUSTMENT MUST BE PERFORMED BY QUALIFIED, COMPETENT TECHNICIAN

1. FOR YOUR SAFETY, TURN OFF, THEN LOCK & TAG-OT THE ELECTRICAL SUPPLY TO THE FAN MOTOR(S).

2. PUSH IN THE MANUAL RESET SWITCH TO ENSURE UNIT IS IN UNTRIP STATE (USING AN OHMMETER, VERIFY THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS CLOSED. THE SWITCH COMES WITH PRE-WIRED CABLE SO OPENING THE SWITCH IS **NOT** NECESSARY TO PERFORM THIS TASK. IF CIRCUIT IS OPEN (TRIPPED STATE) SKIP STEP 3 AND GO TO STEP 4.

3. TURN ADJUSTMENT SCREW CONTERCLOCKWISE (CCW) 1/8 TURN AT A TIME UNTIL THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS OPEN (TRIPPED STATE)

4. ONCE TRIPPED, ROTATE ADJUSTMENT SCREW ¼ TURN CLOCKWISE (CW) AND THEN PUSH IN MANUAL RESET BUTTON (THE CIRCUIT BETWEEN "COMMON" AND "N.C." IS CLOSED)

5. START UP FAN(S) TO DETERMINE IF THE START-UP WILL CAUSE THE CUT-OUT SWITCH TO TRIP.

a. IF THE VIBRATION CUTOUT SWITCH DOES NOT TRIP:

i. START AND STOP THE FAN TWO MORE TIMES AND IF THE CUTOUT SWITCH STILL DOES NOT TRIP, THEN CALIBRATION IS COMPLETE.

b. IF THE VIBRATION CUTOUT SWITCH DID TRIP:

i. TURN OFF, THEN LOCK & TAG-OUT THE ELECTRICAL SUPPLY TO THE FAN MOTOR(S).

ii. ADJUST THE SET POINT SCREW AN ADDITIONAL ¼ TURN CW AND THEN PUSH IN THE RESET BUTTON.

iii. RE-START THE FAN(S) TO DETERMINE IF THE START-UP WILL CAUSE THE SWITCH TO TRIP.

NOTE: REPEAT THIS ADJUSTMENT PROCESS (STEP 5.b.i-5.b.iii) UNTIL THE UNIT DOES NOT TRIP.

iv. ONCE THE FINAL ADJUSTMENT HAS BEEN MADE, START AND STOP THE FAN TWO MORE TIMES AND IF THE CUOUT SWITCH STILL DOES NOT TRIP, THEN CALIBRATION IS COMPLETE.

COMBINATION REMOTE ELECTRICAL RESET AND TIME DELAY START-UP:

1. THE REMOTE RESET AND TIME DELAY ON START-UP SOLENOID ELECTRICAL CIRCUIT SHOULD BE ENERGIZED (VOLTAGE APPLIED) WHENEVER THE FAN IS ON AND DE-ENERGIZED WHENEVER THE FAN IS OFF.

2. THE REMOTE RESET AND TIME DELAY ON START-UP CIRCUIT CONSISTS OF AN ELECTRICAL SOLENOID IN SERIES WITH A THERMISTOR. WHEN THE RATED VOLTAGE IS CONTINUALLY PROVIDED TO THE SOLENOID CIRCUIT AT START-UP, THE RESET SOLENOID BECOMES ENERGIZED FOR APPROXIMATELY 30 SECONDS AFTER WHICH TIME THE HEATED THERMISTOR CAUSES THE SOLENOID TO AUTOMATICALLY BECOME DE-ENERGIZED. THIS ACTION PROVIDES A TRIP LOCKOUT (BYPASS) DURING MACHINE START-UP FOR APPROXIMATELY 30 SECONDS.

3. WHEN THE FAN(S) IS SHUT DOWN, THE VOLTAGE TO THE SOLENOID ELECTRICAL CIRCUIT MUST BE REMOVED TO ALLOW THE THERMISTOR TIME TO COOL OTHERWISE THE START-UP DELAY WILL BE BYPASSED. ONCE THE THERMISTOR COOLS DOWN, THE SWITCH CAN BE REMOTELY RESET BY MOMENTARILY APPLYING VOLTAGE TO THE SOLENOID ELECTRICAL CIRCUIT. IT CAN ALSO BE RESET MANUALLY BY DEPRESSING THE PUSH BUTTON SWITCH. IF START-UP BYPASS IS UNDESIRED, THEN THE VOLTAGE MAY BE LEFT ON WHEN THE FAN IS OFF HOWEVER THE REMOTE RESET WILL NOT FUNCTION UNTIL THE VOLTAGE IS REMOVED AND THE THERMISTOR HAS HAD TIME TO COOL DOWN.

WIRING OF VIBRATION CUTOUT SWITCHES ON UNITS WITH MULTIPLE MOTORS OR CUTOUT SWITCHES:

VIBRATION CUTOUT SWITCHES SHOULD BE WIRED TO SHUT OFF ALL MOTORS ON THE ASSOCIATED FAN DRIVE SYSTEM. THIS MAY REQUIRE WIRING MULTIPLE CUTOUT SWITCHES TO SHUT OFF A SINGLE MOTOR OR WIRING A SINGLE CUTOUT SWITCH TO SHUT OFF MULTIPLE MOTORS. CONTACT YOUR CONTROLS INTEGRATOR FOR DETAILS ON HOW TO WIRE MULTIPLE SWITCHES.

MECHANICAL VIBRATION CUT-OUT SWITCH

(SEE NOTE 5)

LOCAL RESET (SEE NOTE 1)

WATERTIGHT SEAL (SEE NOTE 6)

MOUNTING PLATE

7" FLEXIBLE JACKET

CUSTOMER WIRES (FOR HAZARDOUS RATINGS SEE NOTE 2)

WATER PROOF CONDUIT CONN (SEE NOTE 3)

WIRING DIAGRAM

(TWO-SINGLE POLE DOUBLE THROW SWITCHES - SEE NOTE 5)

TO FAN STARTER

TO ALARM

SWITCH 1

SWITCH 2

110 VOLT (VAC) REMOTE RESET AND TIME DELAY COIL

CASE GROUND

SOLENOID COIL

BEFORE PERFORMING ANY MAINTENANCE, ADJUSTMENT OR INSPECTION OF THE SWITCH, MAKE CERTAIN THAT ALL POWER HAS BEEN DISCONNECTED AND LOCKED IN THE OFF POSITION.

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BAC

Mechanical VCOS Wiring

With Remote/Local Reset, Alarm & Delay (110 VAC)

DRAWING NUMBER:

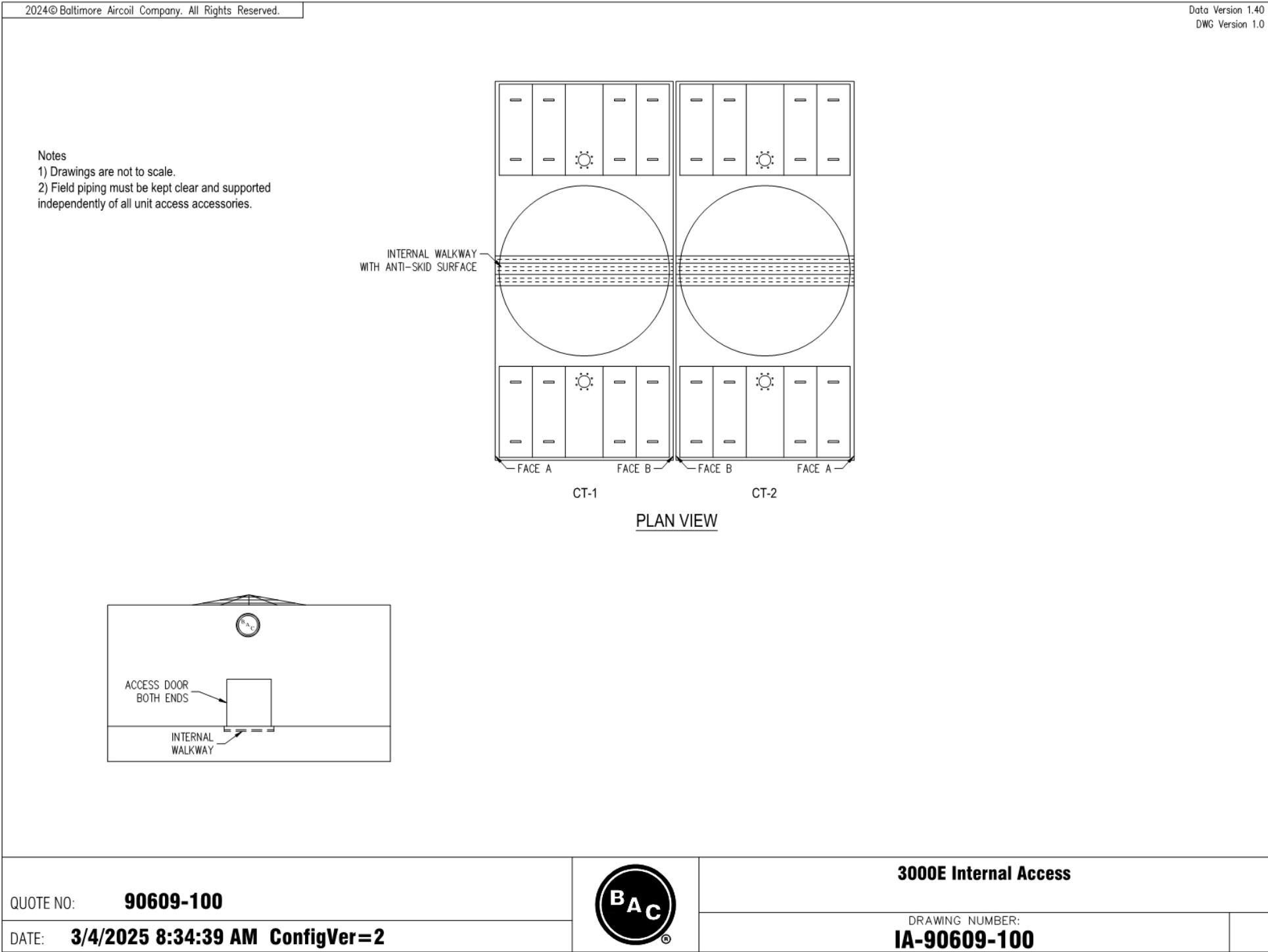
VW-90609-100

Our reference: 90609 100 / 2
Your reference: Academic Village Cooling Tower Replacement

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Internal Access





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Certificate of Wind and Seismic Load Capacity

2006, 2009, 2012, and 2015 International Building Codes (IBC)

Product Line:	Series 3000 Open Cooling Tower
Model:	S3E-1222-06N-2/S



The Baltimore Aircoil Company evaporative cooling product referenced in this certificate has been designed and analyzed in accordance with the wind and seismic load requirements of the 2006 IBC, 2009 IBC, 2012 IBC, 2015 IBC, ASCE/SEI 7-05, and ASCE/SEI 7-10. Seismic qualification is based on analysis.

Wind and seismic load capacities for the referenced unit are provided below. It is the responsibility of the purchaser to determine the suitability of this unit for the specific application. Field modifications to the unit may void this certificate.

Wind Load Rating		
Horizontal Pressure (psf):	$p_h = 138.00$	in accordance with ASCE/SEI 7-05
Horizontal Pressure (psf):	$p_h = 138.00$	in accordance with ASCE/SEI 7-10
Vertical Uplift Pressure (psf):	$p_v = 109.00$	
Conditions:	The unit is supported and anchored as recommended. Anchor bolts are 3/4" diameter, SAE J429 Grade 5 or equivalent.	
Seismic Load Rating		
Design Spectral Acceleration (g) for Component Importance Factor, $I_p = 1.0$:	$S_{DS} = 2.64$	on grade ($z/h = 0.0$), rigid mount
	$S_{DS} = 0.88$	on rooftop ($z/h = 1.0$), rigid mount
	$S_{DS} = 0.59$	on rooftop ($z/h = 1.0$), spring-isolation mount
Conditions:	The unit is installed outside and not within an occupied space.	
	The unit is supported and anchored as recommended. Anchor bolts are 3/4" diameter, SAE J429 Grade 5 or equivalent.	
	All piping provided by others is supported and restrained independently of the unit.	

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DRAWING NUMBER:
IC-90609-100

**SECTION 236500
COOLING TOWERS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Open circuit, induced draft, crossflow cooling towers.

1.02 REFERENCE STANDARDS

- A. ASHRAE 90.1-2019 – Energy Standard for Buildings Except Low-Rise Residential Buildings.
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products 2017.
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2018.
- D. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus 2018.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2018b.
- F. ASTM D2794 - Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- G. ABMA STD 9 - Load Ratings and Fatigue Life for Ball Bearings 2015.
- H. ABMA STD 11 - Load Ratings and Fatigue Life for Roller Bearings 2014.
- I. CTI STD-201 OM - Operations Manual for Thermal Performance Certification of Evaporative Heat Rejection Equipment 2017.
- J. CTI STD-201 RS - Performance Rating of Evaporative Heat Rejection Equipment 2017.
- K. CTI STD-111 - Gear Speed Reducers for Application on Industrial Water Cooling Towers; 2009. (Only for gear-driven products)
- L. ISO 9001 - Quality management systems -- Requirements 2015.
- M. NEMA MG 1 - Motors and Generators 2017.
- N. ASCE/SEI 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

1.03 SUBMITTALS

- A. Product Data: Provide rated capacities, dimensions, weights and point loadings, accessories, required clearances, electrical requirements and wiring diagrams, and location and size of field connections.
- B. Shop Drawings: Indicate suggested structural steel supports including dimensions, sizes, and locations for mounting bolt holes.
- C. Manufacturer's Certificate: Certify that cooling tower performance, based on CTI STD-201 meets or exceeds specified requirements and submit performance curve plotting leaving water temperature against wet bulb temperature.
- D. Manufacturer's Instructions: Submit manufacturer's complete installation instructions.
- E. Operation and Maintenance Data: Include start-up instructions, maintenance data, controls, and accessories.
- F. Warranty: Submit manufacturer's warranty and ensure forms have been filled out in Owner's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum 20 years of documented experience and ISO 9001 certification.
- B. Installer Qualifications: Company specializing in performing the type of work specified in this section with minimum 20 years of experience and approved by manufacturer.
- C. Product Performance:
 - 1. Cooling tower must have a minimum energy rating of [] per ASHRAE 90.1, 189 and CA Title 24.
 - 2. Structural and Seismic Performance: The structure will be designed, tested and certified in accordance with IBC regulations to meet a minimum unrestricted seismic design SDS = ____ g with an Importance Factor of ____ and wind load of ____ psf. Units not provided with a certificate of IBC compliance will not be an acceptable alternative.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Equipment will be factory-assembled, including a cold water basin, heat transfer section, water distribution, fan drive system, and casing panels. For shipping, disassemble into as large as practical sub-assemblies to minimize field work for re-assembly.
- B. Comply with manufacturer's installation instructions for rigging, unloading, and transporting units.

1.06 WARRANTY

- A. One-year warranty after start-up, or eighteen months from date of shipment, whichever occurs first. Warranty to include coverage for defects in material and workmanship.
- B. Fans, fan shafts, bearings, sheaves, gearboxes, drive shafts, couplings, and mechanical equipment support must be warranted against defects in materials and workmanship for a period of five (5) years or seven (7) years, if motor space heater is properly wired.
- C. For direct drive fan system: Fans, fan shafts, bearings, sheaves, gearboxes, drive shafts, couplings, and mechanical equipment support must be warranted against defects in materials and workmanship for a period of seven (7) from date of shipment. Included VFD will have 5-year warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Open Circuit, Induced Draft, Crossflow Cooling Towers:
 - 1. Basis of Design: Baltimore Aircoil Company; Series 3000: www.baltimoreaircoil.com #BAC

2.02 MANUFACTURED UNITS

- A. Provide units suited for outdoor use, factory-assembled, induced draft with vertical discharge of air, and fan assemblies built into casing.
----- ALTERNATE for Knockdown Shipping -----
- B. Provide units suited for outdoor use, induced draft with vertical discharge of air. Units will be shipped disassembled in protective crates. Crates and components must be clearly labeled with part numbers. Assembly of units will be completed onsite. Cold water basins will not have welded seams when shipped knocked down.

2.03 COMPONENTS

A. Cold Water Basin:

1. Constructed with a minimum of 14-gauge galvanized steel with access doors at both ends of tower to air plenum. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Provide sloped basin with drain/clean-out connection.
----- ALTERNATE for TriArmor Basin -----
2. Tri-layer protection system consisting of G-235 galvanized steel, a thermosetting hybrid polymer, and a polyurethane liner factory applied to all submerged surfaces. A Removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. A welded Type 316 stainless steel basin is an acceptable alternative.
----- ALTERNATE for 304 Stainless Steel -----
3. Type 304 welded stainless steel panels and structural members. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. Basins with bolted seams or constructed of 301 stainless steel are not acceptable.
----- ALTERNATE for 316 Stainless Steel-----
4. Type 316 welded stainless steel panels and structural members. A removable anti-vortexing hood will be provided to prevent air entrainment. Large area lift out strainers will be provided with perforated openings sized smaller than the water distribution system nozzles. Sloped with depressed section with drain/clean-out connection. Basins with bolted seams or constructed of 301 stainless steel are not acceptable.
-----ALTERNATE for Basinless Unit-----
5. The unit will be provided without an integral cold water basin. The unit will be mounted on a separate concrete cold water basin provided by others, to allow cooling water to pass directly from the fill into the basin.
6. (Optional) Flume Box: Unit will be equalized with adjacent cell(s) through a factory-supplied flume box connection built into the cold water basin. Hardware, gaskets, and flume will be supplied. Size will be appropriate for the design flowrate of the tower.
7. (Optional) Equalizer Connection: An equalizer connection will be built into the cold water basin on the [bottom, side] with a pipe diameter appropriate for the design flowrate of the tower. See drawings for connection type.
8. (Optional) Bypass Connection: A bypass connection will be built into the cold water basin on the [bottom, side] with a pipe diameter appropriate for the design flowrate of the tower. See drawings for connection type.

B. Water Distribution System

1. The hot water distribution basins will be gravity-fed and accessible from the outside of the unit for service or inspection while unit is in operation. Included weir dams will accommodate a flow range of 50% to 100% of the design flow rate. Lift-off distribution covers will be constructed of steel and designed to withstand a 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load.

----- ALTERNATE for EVERTOUGH Construction-----

2. The hot water distribution basins will be gravity-fed and accessible from the outside of the unit for service or inspection while unit is in operation. Basins must be constructed of corrosion-resistant pultruded fiberglass reinforced polyester (PFRP) or type 316 stainless steel. Included weir dams will accommodate a flow range of 50% to 100% of the design flow rate. Lift-off distribution covers will be constructed of Type 304 stainless steel and designed to withstand a 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load.

C. Casing Panels and Framework:

1. Casing panels will be constructed of corrosion and UV-resistant fiberglass-reinforced polyester (FRP) or Type 304 stainless steel to minimize maintenance requirements and prolong equipment life.

----- ALTERNATE for Thermosetting Hybrid Polymer Panels-----

2. Casing panels will be constructed of galvanized steel protected by a thermosetting hybrid polymer. The polymer to consist of galvanized steel prepared in a four-step (clean, pre-treat, rinse, and dry) process with an electrostatically applied, thermosetting, hybrid polymer fuse-bonded to the substrate during a thermally activated curing stage and monitored by a 23-step quality assurance program. Other coatings must be submitted to the engineer for pre-approval. Approved equals must have undergone testing, resulting in the following results as a minimum:
 - a. When X-scribed to the steel substrate, unit to withstand 6000 hours of 5 percent salt spray per ASTM B117 without blistering, chipping, or loss of adhesion.
 - b. When X-scribed to the steel substrate, unit to withstand 6000 hours of exposure to acidic (pH=4.0) and alkaline (pH=11.0) water solutions at 95 degrees F (35 degrees C) without signs of chemical attack.
 - c. Unit to withstand impact of 160 in-lbs per ASTM D2794 without fracture or delamination of the polymer layer.
 - d. Unit to withstand 6000 hours of ultraviolet radiation equivalent to 120,000 hours of noontime sun exposure without loss of functional properties.
 - e. Unit to withstand 200 thermal shock cycles between minus 25 degrees F and 180 degrees F (minus 32 degrees C and 82 degrees C) without loss of adhesion or other deterioration.
 - f. Unit to withstand 6000 hours of exposure to 60 psi (42,184 kg/m²) water jet without signs of wear or erosion.
 - g. Type 304 stainless steel may be supplied as an equal to eliminate the need for passivation, minimize maintenance requirements, and prolong equipment life.

----- ALTERNATE for Galvanized Steel Panels-----

3. Casing panels and framework will be constructed of G235 galvanized steel.

----- ALTERNATE for 304 Stainless Steel Panels-----

4. Casing panels, framework, and fasteners will be constructed of Type 304 stainless steel. Type 301 stainless steel is not an acceptable alternative.

----- ALTERNATE for 316 Stainless Steel Panels-----

5. Casing panels, framework, and fasteners will be constructed of Type 316 stainless steel. Type 301 or 304 stainless steel are not an acceptable alternative.

D. Air Inlet Louvers

1. Fiberglass Reinforced Polyester (FRP): Air Inlet louvers will be separate from the fill and removable to provide easy access for inspection of the air/water interface at the louver face. Louvers will prevent water splash out during fan cycling and be constructed of maintenance free, corrosion and UV resistant FRP.

----- ALTERNATE for Steel Louvers-----

2. Steel Louvers: Air inlet louvers will be separate from the fill and removable to provide easy access for inspection of the air/water interface at the louver face. Louvers will prevent water splash out during fan cycling. Material of construction must match steel grade of casing panels.

----- ALTERNATE for Combined Inlet Shields (PVC)----

3. PVC Inlet Shields: Louver sections will be individually removable sections. The combined inlet shields will be UV resistant PVC, installed on the air inlet face to minimize air resistance, prevent water splash out, and minimize sunlight exposure to reduce the potential for algae growth in the cold water basin.

4. (Optional) Air Intake Screens:

- a. A removable galvanized steel wire mesh screen with 1"x1" openings will cover air intake areas.

----- ALTERNATE for Stainless Steel Screens----

- b. A removable stainless steel wire mesh screen with 1"x1" openings will cover air intake areas.

- E. Fans: Multi blade, axial type. Fans must factory test-mounted, balanced, and aligned to ensure reliable operation and ease of maintenance. Fan type will be selected to meet sound ratings published on equipment schedule.

F. Motors:

1. Single speed (1800 rpm) premium efficiency, cooling tower duty motor mounted on adjustable steel base. Fan motors will be inverter duty type designed per NEMA Standard MG1, Section IV Part 31. Motors will include an internal space heater that can be wired to remove condensation when motor is not in use.

----- ALTERNATE ENDURADRIVE Fan System -----

2. Direct Drive Motor: See Direct Drive Fan System (2.03 G)

G. Fan Drive System:

1. Direct Drive Fan System: The motor will be directly connected to the fan shaft within the airstream, eliminating the need for couplings, right-angle gears, belts, or sheaves.

- a. Quality Assurance

- 1) Tower thermal performance must be certified per CTI STD-201.
- 2) Manufactured under ISO 9001 approved quality assurance program.
- 3) Seismic shake table tested per ICC-ES A156; must meet local Sds requirement but cannot be less than 0.50.
- 4) Tested and certified to operate continuously at 104°F ambient wet bulb temperature.
- 5) Compatible VFD supplied by tower manufacturer; see VFD specification for details.

- b. (OPTIONAL) Factory Test: The motor will be wired and tested prior to shipping. Testing done on-site is not acceptable. Testing will include:
 - (a) Installation of unit on a test stand for a visual/audible inspection to confirm no excess movement or unusual noises exist.
 - (b) Wiring of motor to a VFD.
 - (c) Running the motor to a specified speed/frequency and taking measurements of power draw to ensure appropriate loading is being achieved.
 - (d) Documentation of testing results supplied in the customer's documents.
- c. General
 - 1) CSA Label and CE mark for safety compliance.
 - 2) Totally Enclosed Air Over (TEAO) IP56 rating.
 - 3) Interior permanent magnet rotor construction; synchronous design; magnets enclosed inside the rotor lamination; magnets with high temperature grade capable of 200°C conditions without loss of magnetization.
 - 4) Compliance with NEMA MG 1 part 31 standards for definite-purpose inverter-fed motors suitable for 2000 volt peak at 10,000 volt per microsecond.
- d. Components
 - 1) Bearing isolator (seal) on motor shaft provided with shaft grounding device, utilizing two carbon grounding brushes to eliminate bearing currents.
 - 2) Salient pole permanent magnet design rotor resulting in no I²R losses.
 - 3) Stator consisting of low-loss C5a coated electrical steel.
 - 4) Integral stator cooling fins, not a shaft mounted fan, for controlling rotor and stator temperatures during operation.
 - 5) Class H insulation system rated at 1850 Volts peak, and thermally-rated wire when tested per ASTM D-2307 for 600,000 hours extrapolated life at 155°C minimum.
 - 6) Shaft sealed by three O-rings, with two conductive O-rings to properly ground the bearing, eliminating damaging currents in the bearings.
 - 7) Oversized conduit box with provisions for grounding inside.
 - 8) Integral condensate drain system.
 - 9) Three normally closed thermostats, one per phase.
 - 10) Open ball bearings with a minimum L10 life of 100,000 hours.
 - 11) Bearings sized to handle unbalanced loads based on an ISO Balance Grade of 6.3.
 - 12) Re-greaseable bearing system including stainless steel inlet fitting and grease drain provided with square stainless-steel square head pipe plugs.
 - 13) E-coat primer on cast iron parts prior to application of top coat.
 - 14) Enhanced cooling tower duty paint that withstands 1000 hour salt fog test.

----- ALTERNATE Belt Drive -----

2. Belt Drive: Designed for minimum 150 percent motor nameplate power. Fan and motor sheave(s) will be fabricated from corrosion-resistant materials to minimize maintenance and ensure maximum drive and powerband operating life. Bearings must have a minimum L-10 life of 80,000 hours per ABMA STD 11. Belt tension must be easily adjusted in the field.

(Optional) Extended Grease Fittings: Extended grease lines are supplied that reach from the bearing to fittings on the exterior casing near the access doors. This facilitates easy periodic bearing maintenance without entering the tower.

----- ALTERNATE for BALTIGUARD™ Fan System-----

3. Two single speed fan motors, one sized for full speed and load, the other sized for 2/3 speed, and approximately 1/3 the full load horsepower, will be provided for capacity control and stand-by protection from drive or motor failure. Two-speed motor(s) are not an acceptable alternative. Fan and motor sheave(s) will be fabricated from corrosion-resistant materials to minimize maintenance and ensure maximum drive and powerband operating life. Bearings must have a minimum L-10 life of 80,000 hours per ABMA STD 11. Belt tension must be easily adjusted in the field.

----- ALTERNATE Internal Gear Drive -----

4. Gear Drive with Internal Motor: Industrial duty, right angle gear designed in accordance with CTI STD-111. Gear must be rated for service factor of 2.0 with forward and reverse operation. Oil level fill port and sight glass are located on the gear. Gear connected to motor by flexible coupling.

----- ALTERNATE External Gear Drive -----

5. Gear Drive with External Motor: Industrial duty, right angle gear designed in accordance with CTI STD-111. Gear must be rated for service factor of 2.0 with forward and reverse operation. Oil level fill port and sight glass are located on the gear. Gear connected to motor with a drive shaft.

H. Fan Guard:

1. Welded steel rod and wire guard, hot dipped galvanized after fabrication. Installed over fan discharge.

-----ALTERNATE for stainless steel fan guard-----

2. Welded stainless steel rod and wire guard, placed over fan discharge.

- I. (Optional) Motor Removal Davit: The unit will be equipped with a mechanical equipment removal davit. The motor will lower from the mechanical equipment supports down to grade. Davit will attach to the unit without the need for tools. If tools are required for davit installation or removal, provide (1) davit for each motor provided.

- J. Gravity-fed Distribution: Hot water basins will have removable covers for inspection while unit is in operation, weir dams and metering nozzles for at least 50 percent turndown capability. Gravity flow nozzles will be snap-in type for easy removal. Pressurized nozzles are not acceptable.

- K. (Optional) Balancing Valves: Heavy-duty butterfly valves will be provided at the hot water inlet connections. These valves will include cast iron bodies, elastomer seat and steel operating lever.

-----Optional EASY CONNECT Single Inlet-----

- L. Single Inlet Connection: Each tower cell will be furnished with a single water inlet connection complete with the means to automatically balance flow rates to the hot water basins.

(Optional Drain Valve on EASY CONNECT): The factory-supplied internal piping will include a manual drain valve positioned to drain the piping during shutdown to reduce risk of freezing.

- M. Fill:

1. The fill and integral drift eliminators will be formed from self-extinguishing (per ASTM-568) polyvinyl chloride (PVC) having a flame spread rating of 5 per ASTM E84 and will be impervious to rot, decay, fungus and biological attack. The fill is suitable for entering water temperatures up to and including 130°F (54.4°C). The fill must be manufactured, tested and rated by the cooling tower manufacturer and are elevated above the cold water basin floor to facilitate cleaning. If louvers are attached to fill, a spare set of fill sheets are required in case of icing and scaling damage.

----ALTERNATE for High-Temp Fill----

2. The fill and integral drift eliminators will be formed from self-extinguishing (per ASTM-568) chlorinated polyvinyl chloride (CPVC) having a flame spread rating of 5 per ASTM E84 and will be impervious to rot, decay, fungus and biological attack. The fill is suitable for entering water temperatures up to and including 140°F (60.0°C). The fill must be manufactured, tested and rated by the cooling tower manufacturer and are elevated above the cold water basin floor to facilitate cleaning. If louvers are attached to fill, a spare set of fill sheets are required in case of premature icing and scaling.

- N. Drift Eliminators: Three-pass design made of PVC material. Primary eliminators will be integrated into the fill media.

- O. Basin Water Level Control:

1. Corrosion resistant PVC make-up valve with plastic float for easy adjustment of operating water level.

----- ALTERNATE for Electric Water Level Controller-----

2. Electric water level control with NEMA 4 enclosure, solid state controls, LED status light, and stainless steel water level sensing electrodes. Number and position of probes provided to sense the following: high water level, low water level, high water alarm level, low water alarm level, heater safety cutout, and automatic solenoid valve. Include all necessary mounting hardware.

2.04 ACCESSORIES

- A. (Optional) Electric Immersion Heaters: In pan suitable to maintain temperature of water in pan at 40 degrees F (4.4 degrees C) when outside temperature is 0 degrees F (-17.7 degrees C) [OR -20 degrees F (-28.9 degrees C)] and wind velocity is 15 mph (25 kph); immersion thermostat and float control operate heaters on low temperature when the pan is filled. Heaters will be constructed of copper.
- B. (Optional) Basin Sweeper Piping: The cold water basin of the cooling tower will be equipped with PVC sump sweeper piping with plastic eductor nozzles. The piping must be designed specifically for the size and shape of the basin to ensure full agitation.
- C. (Optional) Fan Cylinder Extension: To extend the height of the tower equal to the surrounding enclosure, the cooling tower will be provided with _____ inches (mm) of fan cylinder extension. The fan cylinder extension will match the construction of the fan deck.

D. (Optional) Vibration Switch

1. Provide a mechanical local reset vibration switch. The mechanical vibration cutout switch will be guaranteed to trip at a point so as not to cause damage to the cooling tower. To ensure this, the trip point will be set in a frequency range of 0 to 3,600 RPM and a trip point of 0.2 to 2.0 g's.
2. (ALTERNATE) Provide an electronic remote reset vibration switch with contact for BAS monitoring. Wiring will be by the installing contractor. The electronic vibration cutout switch will be set to trip at a point so as not to cause damage to the cooling tower. To ensure this, the trip point will be set in a frequency range of 2 to 1000 Hertz and a trip point of 0.45 in/sec (0.0114 m/sec).

E. Access Packages: See submittal documents for access package requirements. Platforms and ladders must ship assembled from cooling tower manufacturer.

1. Plenum Access: Two hinged access doors must be provided for access into the plenum section. Include an internal walkway for inspection and maintenance. All working surfaces will be able to withstand 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load. Other components of the cooling tower, i.e. basin and fill/drift eliminators, will not be considered an internal working surface. Cooling tower designs that utilize these surfaces as working platforms will not be acceptable. Cooling tower manufacturers that promote these surfaces to be used as a working platform will provide a two-year extended warranty to the Owner to repair any damage to these surfaces caused during routine maintenance.
2. (Optional) Fan Deck Ladder with Handrails: A ladder with steel safety cage and safety gate will be provided for access to the fan deck. Access door or service platforms are not acceptable. 1-1/4 inch (32 mm) galvanized steel pipe handrail will be provided around the perimeter of the cooling tower cells. The handrails will be provided with knee and toe rails and will conform to OSHA requirements applicable at the time of shipment. To comply with OSHA 1910.28(b)(9), fan deck ladders exceeding 24' in total length must be designed to accept a ladder safety system. A ladder safety cage is not an acceptable alternative to a ladder safety system and will not be provided on ladders exceeding 24' in total length.
3. (Optional) Louver Face External Platforms: Easy access to the hot water basins for inspection of spray water distribution, even during tower operation, will be provided by external platforms at the louver face. Fan deck ladders and handrails, which add to the overall height of the tower, are not acceptable. Platforms and ladders must ship assembled from cooling tower manufacturer. To comply with OSHA 1910.28(b)(9), louver face external platform ladders exceeding 24' in total length must be designed to accept a ladder safety system. A ladder safety cage is not an acceptable alternative to a ladder safety system and will not be provided on ladders exceeding 24' in total length.
4. (Optional. Available on Double Height Models) Internal Service Platform: An internal platform will be provided in the plenum section to provide for inspection and maintenance of internal components and drive system. All working surfaces will be able to withstand 50 psf (244 kg/m²) live load or 200 pound (90.7 kg) concentrated load. Platforms and ladders must ship assembled from cooling tower manufacturer.
5. (Optional) Access Door Platform: An external galvanized steel access platform at the access door of the unit(s) provides access to the spray distribution system or internal plenum. An aluminum ladder and 1-1/4 inch (32 mm) galvanized steel pipe safety railing is included with the platform. This option meets pertinent OSHA standards. Platforms and ladders must ship assembled from cooling tower manufacturer.

6. (Optional) Safety Gates: All handrail access openings will be provided with a self-closing safety gate for increased safety.
- F. (Optional) Sound Attenuation:
 1. Discharge Sound Attenuation: The unit will be equipped with straight discharge attenuation with sound absorbing fiberglass acoustical baffles to reduce sound levels from the top of the unit.
 2. Intake Sound Attenuation: The unit will be equipped with attenuation at the unit's air intake. Sound absorbing fiberglass acoustical baffles will reduce sound levels from the air intake side of the unit.
- G. (Optional) Velocity Recovery Stacks: A conical shaped fan cowl extension will be provided that allows for increased cooling tower performance. Increase in thermal performance must be certified per CTI STD 201. VR stack material of construction will match unit.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Provide the services of the manufacturer's field representative to supervise rigging, hoisting, and installation, allowing for minimum of one eight-hour day per tower.
- C. Install tower on structural steel beams as instructed by manufacturer.
- D. Connect condenser water piping to tower. Pitch condenser water supply to tower and condenser water suction away from tower.
- E. Connect make-up water piping to tower. Pitch to tower.
- F. Connect overflow and drain to acceptable discharge point as required by jurisdiction.

3.02 FIELD QUALITY CONTROL

- A. See Section Quality Requirements, for additional requirements.
- B. Provide the services of the manufacturer's field representative to inspect tower after installation and submit report prior to start-up, verifying installation is in accordance with specifications and manufacturer's recommendations.

3.03 SYSTEM START-UP

- A. Start-up tower in presence of and instruct Owner's operating personnel.

3.04 SCHEDULES

- A. Cooling Towers
 1. Drawing Code:
 2. Location:
 3. Manufacturer:
 4. Model Number:
 5. Cooling Capacity
 - a. Water Flow Rate:
 - b. Entering Water Temperature:
 - c. Leaving Water Temperature:
 6. Entering Air WB Temperature:
 7. Number of Fan Motors:

8. Motor Size: [] HP
9. Motor Electrical Characteristics: [] Volts, Three-Phase, 60 Hz.
10. Basin Heaters No. and Type:

END OF SECTION

1. THESE ENGINEERING DOCUMENTS AND THE RESULTING INSTALLATION OF THE DEPICTED HVAC SYSTEMS FOR THIS PROJECT ARE INTENDED TO CONFORM TO THE FOLLOWING CODES AND STANDARDS:

- FLORIDA BUILDING CODE 8TH EDITION (2023)
- FLORIDA BUILDING CODE EXISTING BUILDINGS 8TH EDITION (2023)
- FLORIDA BUILDING CODE MECHANICAL 8TH EDITION (2023)
- FLORIDA ENERGY CONSERVATION CODE 8TH EDITION (2023)
- FLORIDA FIRE PREVENTION CODE 8TH EDITION (2023)
- ASHRAE 90-2009 FUNDAMENTALS HANDBOOK
- MSS SP-69-2002 PIPE HANGERS AND SUPPORTS - SELECTION AND APPLICATION
- NFPA 214 - STANDARD ON COOLING TOWERS
- NFPA 101 - LIFE SAFETY CODE

IF WORK AS LAID OUT, INDICATED OR SPECIFIED IS CONTRARY TO OR CONFLICTS WITH THE LISTED CODES AND STANDARDS, THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING A BID. THE ARCHITECT/ENGINEER WILL THEN ISSUE INSTRUCTIONS AS HOW TO PROCEED.

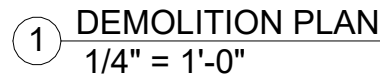
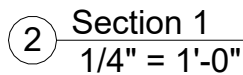
2. ALL EQUIPMENT IS TO BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS, SPECIFICATIONS, AND RECOMMENDATIONS FOR SAFE AND EFFICIENT OPERATIONS. ALL MANUFACTURER OPERATION AND MAINTENANCE GUIDES SHALL BE ISSUED TO THE BUILDING OPERATOR AFTER SUCCESSFUL COMPLETION OF MAINTENANCE AND/OR PREVENTATIVE MAINTENANCE PROCEDURES TRAINING OF THE BUILDING OPERATORS.

3. DESIGN CRITERIA INCLUDES BUT NOT LIMITED TO:

- CLIMATIC DESIGN CONDITIONS - 80°F EVAPORATION DESIGN PARAMETER FOR SUMMER (MIAMI, FL)

Demolition Scope Summary

- A. Coordinate timing and logistics with the Facility Management the time frame and schedule available for system shut down
- B. Disconnect all existing electrical wiring serving cooling tower motors.
- C. Remove the cooling tower fan motors and return these to the facility manager.
- D. Remove existing cooling towers and leave the space open and ready to accept the new equipment. Contractor is responsible for all necessary crane service, rigging, transport of towers to disposal site, and disposal fees.



This item has been electronically signed and sealed by Albert S. Shub on the date 04/11/2017 to the seal using a SHA authentication code. Printed copies of this document are considered signed and sealed and the authentication code must be verified on electronic copies.

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REC. 004

Academic Village Cooling Tower Replacement Level 1 Alteration per FBC 2023 Existing Buildings

Pembroke Pines, Florida 33025

City of Pembroke Pines
Public Services Dep.

[illegible]

DESIGN
DELIVERABLE: SITE PLAN
ISSUE DATE:05-30-2017

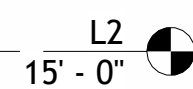
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SHEET TITLE

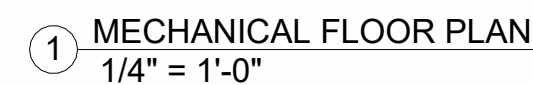
DEMOLITION PLAN

SHEET TITLE

M-1



③ Section 2
1/4" = 1'-0"

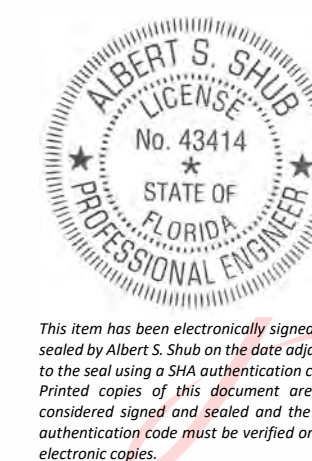


COOLING TOWER SCHEDULE	
OWER NUMBER	CT-1 & CT-2
CAPACITY (MBH) TOTAL	12,245.10
FLOW RATE (gpm) TOTAL	1,750.00
EWT/LWT (°F)	99/85
DESIGN WB TEMP (°F)	80
FAN MOTOR HP	2 @ 25 EA
FAN MOTOR SPEED (rpm)	1800
TOWER FAN SPEED (rpm)	--
MOTOR VOLTAGE	460-3-60
MANUFACTURER	BAC
MODEL	S3E-1222-00N-2S
DRIVE TYPE	BELT
OPERATING WEIGHT (lbs)	23,799
LOCATION	GROUND
1. INDUCED DRAFT CROSSFLOW COOLING TOWER WITH CT1 CERTIFIED STD-201 PERFORMANCE AND FULLY WIND-LOADED CONSTRUCTION TO WITHSTAND (138 PSF HORIZONTAL/109 PSF VERTICAL) HURRICANE FORCE WINDS, SIGNED AND SEALED ENGINEERED CALCULATIONS FROM THE MANUFACTURER REQUIRED. COOLING TOWER AND INSTALLATION TO COMPLY WITH FBC-2020 MECHANICAL SECTION 908.1 AND 908.4 2. COOLING TOWERS TO BE OF 304L STAINLESS STEEL CONSTRUCTION AND HARDWARE INCLUDING DISTRIBUTION AND COLLECTION BASINS 3. INTERIOR PLENUM WALKWAY 4. PREMIUM EFFICIENCY, DRIVE DUTY MOTORS WITH SHAFT GROUNDING RINGS 5. 1 YEAR PARTS AND LABOR BASE WARRANTY PLUS AN EXTENDED 4-YEAR FACTORY PARTS AND CONTRACTOR LABOR WARRANTY IS REQUIRED 6. VIBRATION DETECTION SWITCH FOR EACH TOWER METRIX 5550. 7. 80 cfm MAX SOUND RATING AT 5ft FROM AIR INLET FACE. 8. FACTORY ASSISTED START-UP. 9. FM CERTIFICATION TO ALLOW OPERATION WITHOUT DEDICATED FIRE PROTECTION SYSTEM. 10. 5ft LADDER EXTENSIONS.	

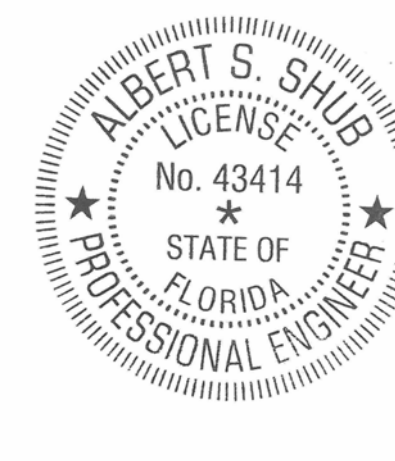
(X)	DRAWING NOTES
1	NEW CT-1, CT-2 MOUNTED ON EXISTING CONCRETE WALL STRUCTURE. SEE CT SCHEDULE ON M SHEET FOR STRUCTURAL DRAWINGS FOR TIE-DOWN INFORMATION. FINAL POSITION OF COOLING TOWER MUST ALIGN WITH EXISTING CWS/R PIPING TERMINATION.
2	EXISTING SHUT-OFF VALVE.
3	EXISTING AUTO-FLOW CONTROL VALVE.

New installation scope summary

- 1- Install new cooling towers as specified. Set cooling tower on existing structure such that all piping connections line up with existing piping. Rearranging existing piping is not part of the scope of work.
- 2- Tie down cooling towers as specified in structural drawings.
- 3- Connect new cooling tower motors to existing disconnect switches. The variable frequency drives that control the motors are existing and located within the chiller water plant. Contractor to replace as necessary the sump water temperature sensor and wiring for proper system operation. All operating set point to remain as they are.
- 4- Start up new cooling towers. Verify proper operation.



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Academic Village Cooling Tower Replacement Level 1 Alteration per FBC 2023 Existing Buildings

Pembroke Pines, Florida 33025

City of Pembroke Pines
Public Services Dep.[illegible]

DESIGN
DELIVERABLE: SITE PLAN
ISSUE DATE:05-30-2017

PROJECT NUMBER	25017
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MECHANICAL FLOOR PLAN

SHEET TITLE

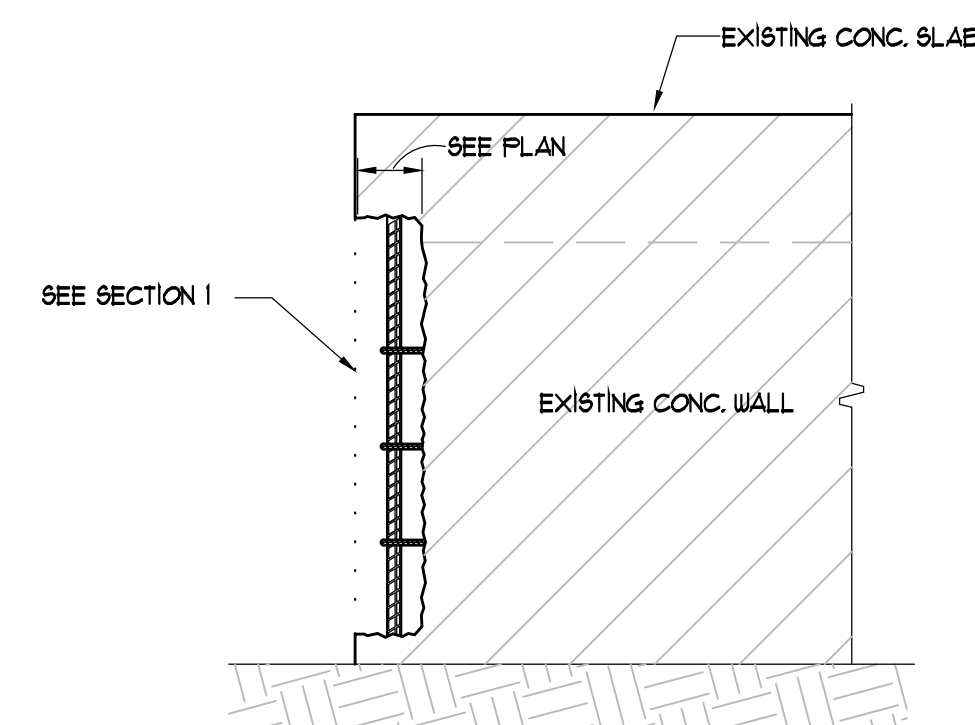
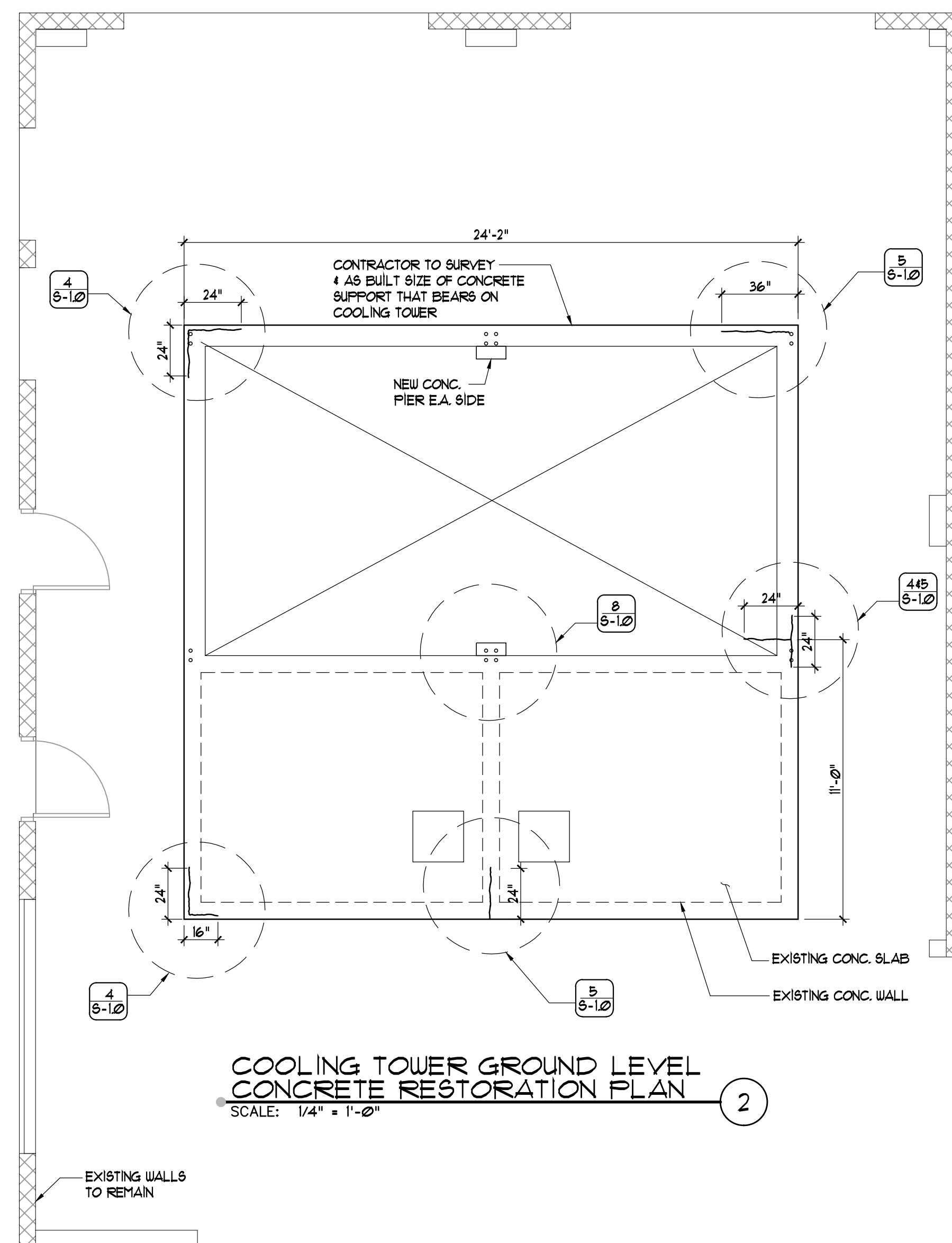
M-2

Diagram illustrating a section through a concrete member showing repair details for corroded reinforcement bars. The diagram includes the following labels and dimensions:

- SAW-CUT 1/4" - 1/2" DEEP AND AS PER MANUF. RECOMMENDATIONS ALONG REPAIR AREA TYP.** (Pointing to the repair cut)
- PREPARED CONCRETE SURFACE TO RECEIVE PATCH - SEE MANUF. SPECIFICATION** (Pointing to the prepared concrete surface)
- OXIDIZED (CORRODED) BARS** (Pointing to the corroded reinforcement bars)
- 3/4" MIN. CLEARANCE REFER TO NOTE #1** (Pointing to the clearance around the bars)
- SEPARATE BARS 1/4" AND CLEAN CONTACT AREA** (Pointing to the separate bars and contact area)
- 2" OF "GOOD" UNCORRODED REINFORCING BAR BEYOND POINT OF CORROSION / SCALY Rust** (Pointing to the good reinforcement bar)
- UNOXIDIZED & TIGHTLY BONDED BARS REFER TO NOTE #3.** (Pointing to the unoxidized bars)
- 3/4"** (Dimension indicating the width of the repair area)
- 3/4"** (Dimension indicating the width of the repair area)
- SECTION THROUGH CONCRETE MEMBER** (Caption at the bottom)

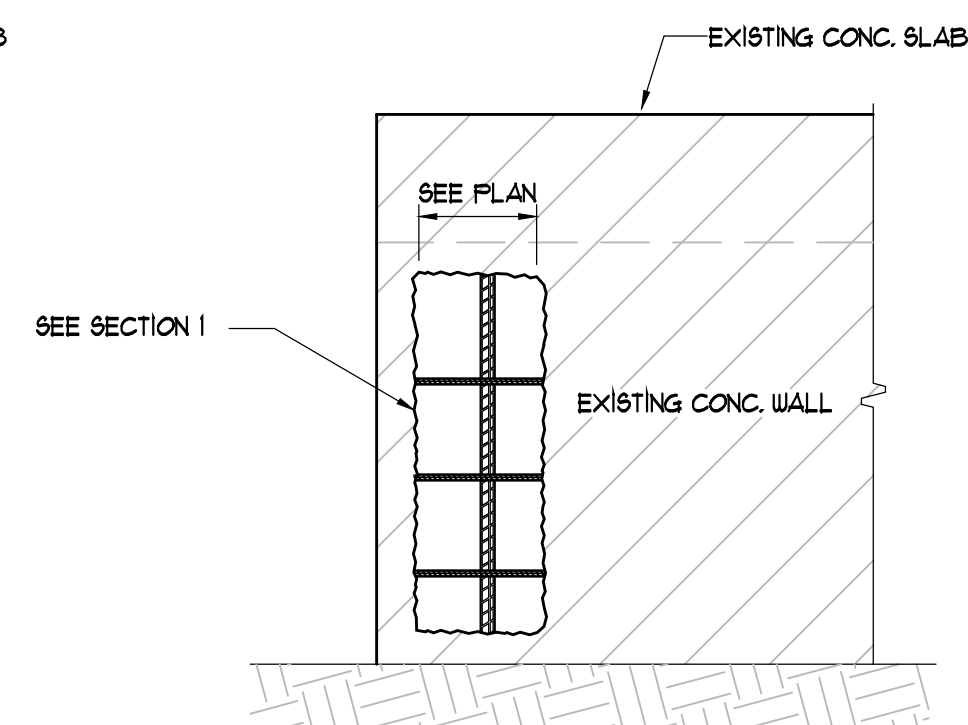
- REPAIR PROCEDURE & INSPECTION SCHEDULE:

1. PRELIMINARY INSPECTION / MEETING WITH CONTRACTOR PRIOR TO START OF CONSTRUCTION.
2. REMOVE ALL LOOSE CONCRETE AT ALL MARKED AREAS OR AS INDICATED ON DRAWINGS, IF AREAS ARE NOT MARKED IN FIELD NOTIFY CSW FOR INSPECTION TO MARK AREAS IN NEED OF REPAIR.
3. PERFORM ADDITIONAL CHIPPING IF REQUIRED BY CSW AFTER INSPECTION 2.
4. AFTER STEP TWO AND THREE ARE APPROVED, PROPERLY PREPARE ALL EXISTING CONCRETE SURFACES PER TYPICAL DETAILS AND NOTES, PROPERLY CLEAN ALL EXPOSED REBAR.
5. FINAL OBSERVATION OF PREPARED AREAS, IF ADDITIONAL CLEANING OR PREPARATION IS REQUIRED REINSPECTION IS NEEDED.
6. OBSERVATION OF BONDING AGENT APPLIED AS APPLICABLE.
7. OBSERVATION OF COMPLETED CONCRETE IN PLACE, ANY UNBONDED OR CRACKED CONCRETE MUST BE REMOVED AND REPAIRED PER PREVIOUS STEPS.



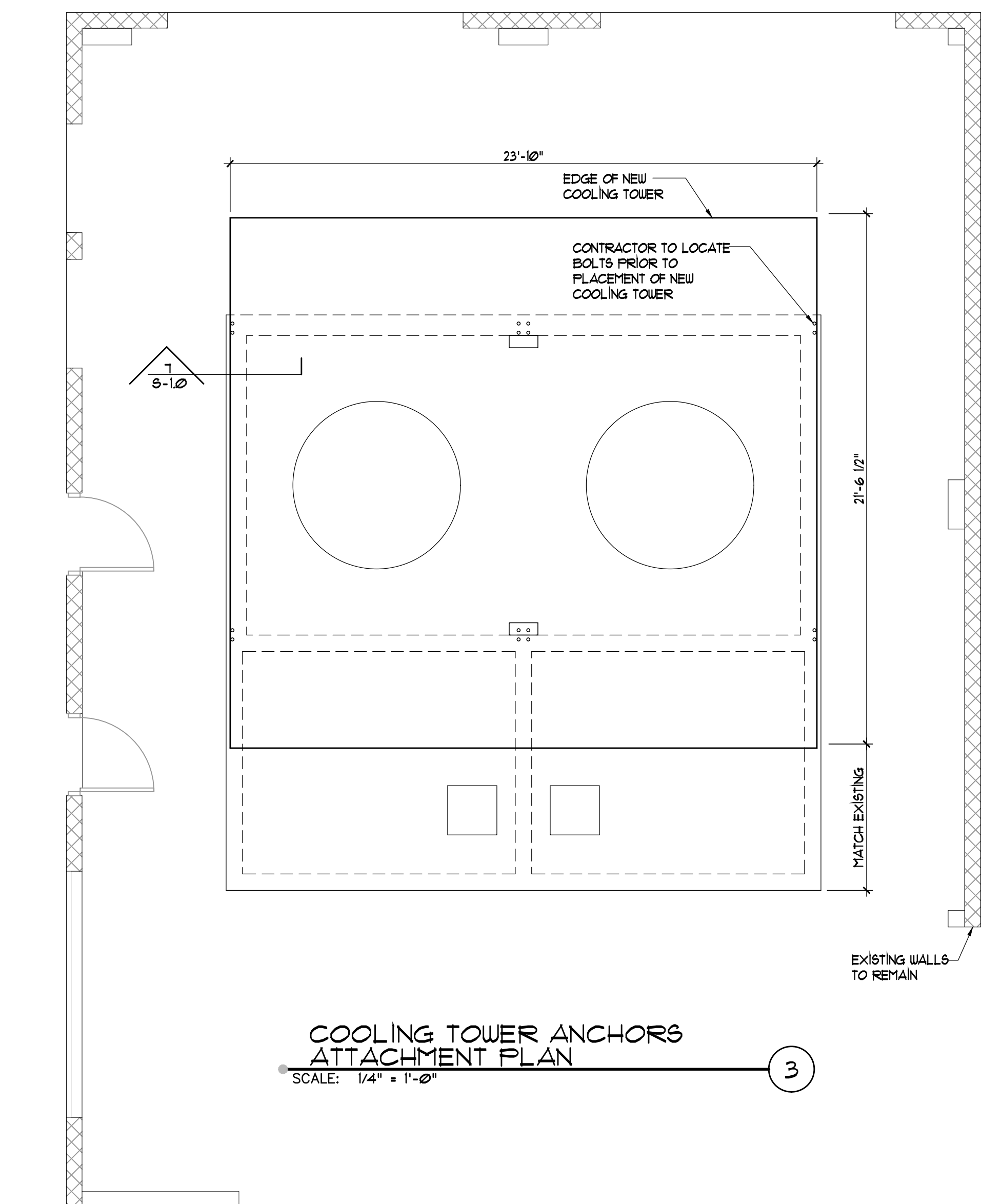
CORNER WALL REPAIR TYPICAL DETAIL

SCALE: 1" = 1'-0"



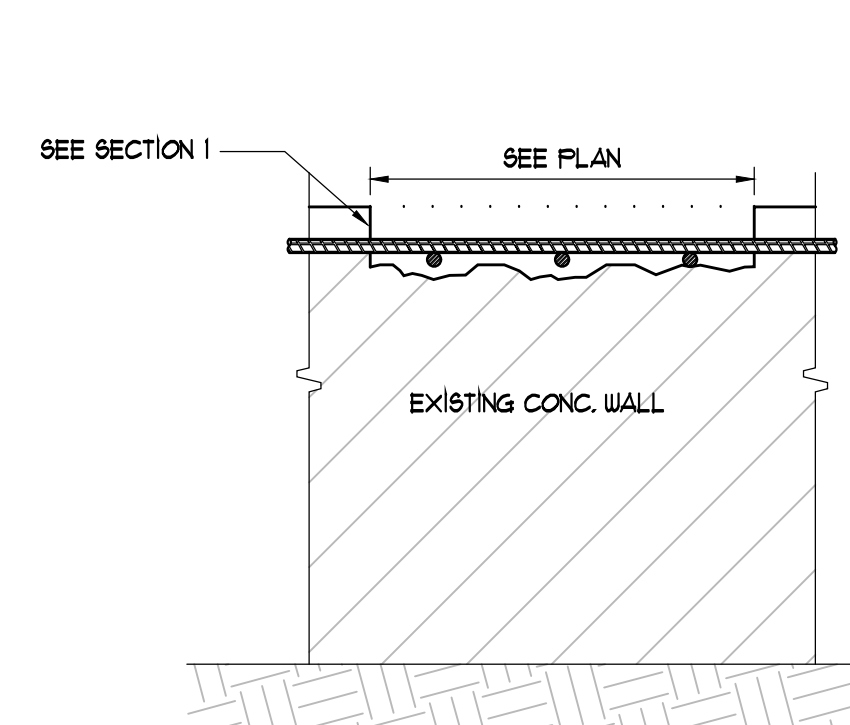
SIDE WALL REPAIR TYPICAL DETAIL

SCALE: 1" = 1'-0"



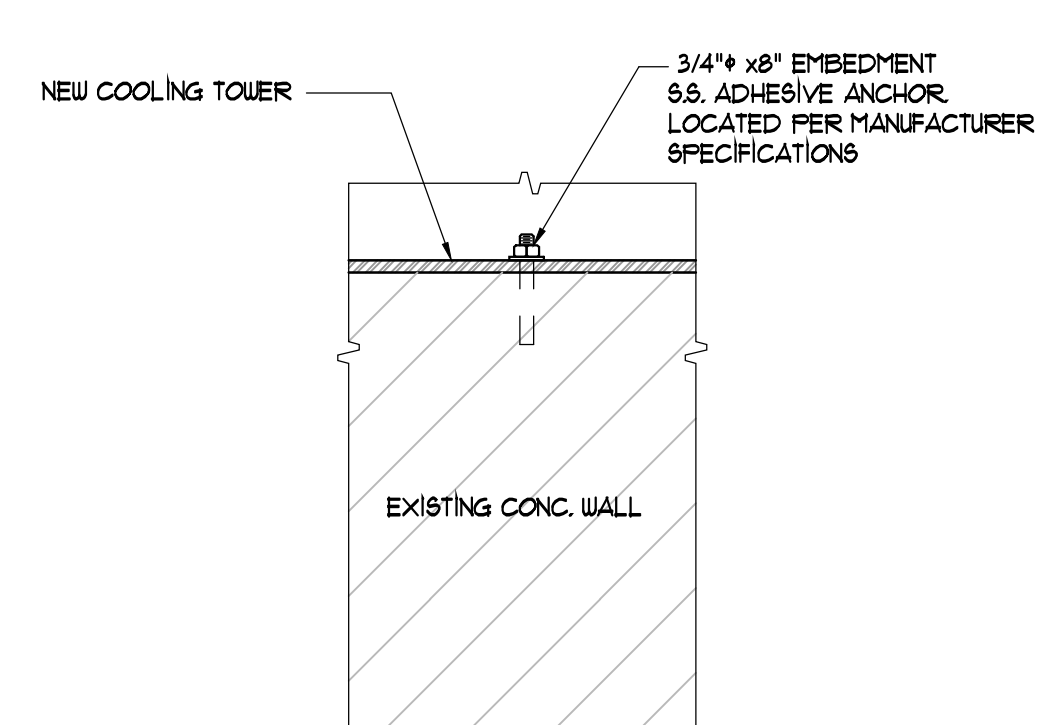
COOLING TOWER ANCHORS ATTACHMENT PLAN

SCALE: 1/4" = 1'-0"



TOP OF SLAB REPAIR
TYPICAL DETAIL

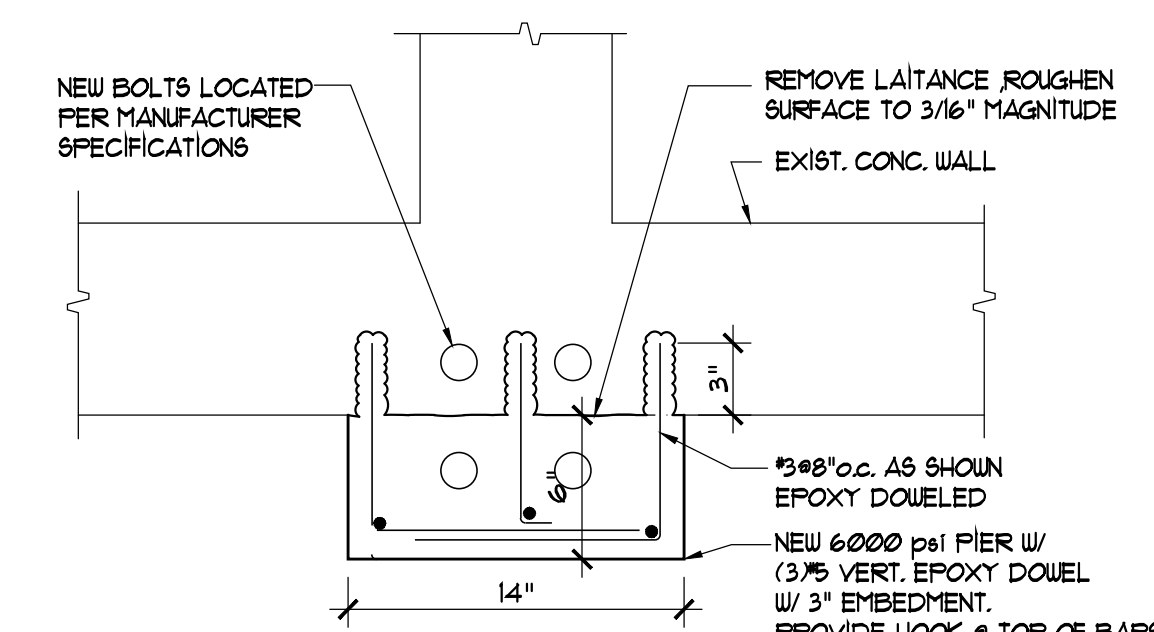
SCALE: 1" = 1'-0"



SECTION

SCALE: 1 1/2" = 1'-0"

WALL	± 12'-4"
T.O.S	± 4'-0"



SECTION

SCALE: $1 \frac{1}{2}'' = 1'-0''$

[illegible]

DESIGN
DELIVERABLE:
ISSUE DATE:

PROJECT NUMBER:
DRAWN BY:
CHECKED BY:

SHEET TITLE

SHEET TITLE

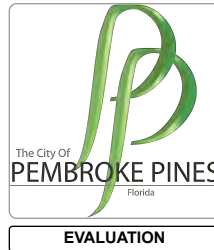
Academic Village Community Tower Replacement

Pembroke Pines, Florida 33025

City of Pembroke Pines

S-1.0


Digitally signed
by J M Sauve
Date:
2025.07.08
J Sauve, F.
16:14:46 -04'00'



Academic Village Cooling Tower

 Invitation For Bid



 Public Services


 03105, 03124, 03127, 03128, 03502... show all


Project ID: PSPW-25-10

Release Date: Thursday, July 17, 2025

Due Date: Tuesday, September 2, 2025 2:00pm

 Posted  Thursday, July 17, 2025 9:14pm

 Bid Unsealed Tuesday, September 2, 2025 2:36pm by Debra Rogers

 Pricing Unsealed Tuesday, September 2, 2025 2:36pm by Debra Rogers

All dates & times in Eastern Time

Edit   Preview

1. NOTICE

Notice is hereby given that the City Commission of the City of Pembroke Pines is seeking sealed proposals for:

IFB # PSPW-25-10

Academic Village Cooling Tower

Solicitations may be found on the City of Pembroke Pines website under the Procurement Department at <http://www.ppines.com/index.aspx?NID=667>, and may be downloaded directly from the OpenGov platform at <https://procurement.opengov.com/portal/pembrokepines>.

For Technical Support, proposers can reach the OpenGov Service Desk between 7:00 am to 10:00 pm from Monday through Friday via the following methods:

- Chat (preferred method): Click the button in the lower right-hand corner of the portal.
- E-mail: procurement-support@opengov.com
- Phone: 1 (650) 336-7167

If additional help is needed with downloading the solicitation package please contact the Procurement Department at (954) 518-9020 or by email at purchasing@ppines.com. The Procurement Department hours are between 7:00 am to 6:00 pm on Monday through Thursday and is located at 8300 South Palm Drive, Pembroke Pines, FL 33025.

Bidders shall submit all questions regarding this bid via the City's e-Procurement Portal, located at <https://procurement.opengov.com/portal/pembrokepines>. Please note the deadline for submitting questions. All answers will be posted on the City's e-Procurement Portal. Bidders may also click "Follow" on this bid to receive an email notification when answers are posted. It is the bidder's responsibility to check the portal for updates. Only written responses issued through the OpenGov platform will be considered official for interpretations or clarifications.

Proposals will be accepted until 2:00 pm on Tuesday, September 2, 2025, electronically at <https://procurement.opengov.com/portal/pembrokepines/projects/175682>.

Bid Opening: The sealed electronic proposals will be publicly opened at 2:30 pm, on the bid due date, by the City Clerk's Office, in the **City Clerk's Office Conference Room located on the 4th Floor in the Charles F. Dodge City Center**/City Hall Administration Building, located at 601 City Center Way, Pembroke Pines, Florida, 33025.

Virtual Bid Opening: In light of public health concerns and to ensure accessibility for all, the City encourages interested parties and the public to participate virtually via live streaming instead of attending the meeting in person. As a result, meetings may be a combination of in-person and virtual, all as provided by law. To virtually attend the bid opening, please use the Cisco Webex Meetings platform.

Virtual Meeting Details:

- WebEx Meeting Link: <https://ppines.webex.com/meet/purchasing>
- Cisco Webex Meeting Number: 717 019 586
- Join by Phone Number: +1-408-418-9388

The public may download the **Cisco Webex Meetings app** from <https://www.webex.com/downloads.html/>.

To ensure an efficient meeting process, participants are requested to mute their audio and camera during the meeting. While the public is welcome to attend the virtual bid opening, **please note that active participation and commenting will not be allowed during the proceedings.**

For further information about the bid opening or assistance in accessing the virtual meeting, please contact:

Ivan Ospinal or other Procurement Staff in the Procurement Department

City of Pembroke Pines

8300 South Palm Drive,

Pembroke Pines, FL 33025

(954) 518-9020 or 954-518-9020

purchasing@ppines.com



QUESTION & ANSWER REPORT

IFB No. PSPW-25-10

Academic Village Cooling Tower

RESPONSE DEADLINE: September 2, 2025 at 2:00 pm

Tuesday, September 16, 2025

Approved, Unanswered Questions

Approved, Answers Provided

1. Cooling Tower

Jul 18, 2025 8:02 AM

Question: Is the cooling tower provided by the city?

Jul 18, 2025 8:02 AM

Answered: Contractor is responsible for providing the cooling tower and any other components listed in the bid package, in addition to a full turn-key installation.

Jul 29, 2025 7:09 AM

2. Brand of cooling towers

Jul 25, 2025 11:59 AM

Question: Would you consider an alternate if we can find one that fits and meets all the specs?

Jul 25, 2025 11:59 AM

Answered: Alternate equipment will not be accepted.

Jul 29, 2025 7:10 AM

3. No subject

Aug 4, 2025 4:02 PM

Question: We would like to confirm if the solicitation is open for HVAC contractors or if only General Contractors are able to participate.

Aug 4, 2025 4:02 PM

Answered: Yes, the solicitation is open to HVAC contractors as well as General Contractors.

Aug 5, 2025 7:08 AM

4. No subject

Aug 4, 2025 8:38 PM

Question: Is the City planning to hold another site meeting?

Aug 4, 2025 8:38 PM

Answered: The City has completed all scheduled site visits. Additional visits may be requested, but they are subject to approval based on the availability of City personnel.

Aug 6, 2025 5:09 PM

5. No subject

Aug 6, 2025 2:21 AM

Question: The link for Proposers_Background_Inform document does not work. I understand that this is required for the bid submission. Please advise.

Aug 6, 2025 2:21 AM

Answered: We suggest attempting to download and open the file using a computer that has Microsoft Excel installed, as this may resolve the issue. If this does not solve the problem, please contact procurement-support@opengov.com for further assistance.

Aug 6, 2025 11:31 AM

6. No subject

Aug 5, 2025 4:48 PM

Question: Can you please provide electrical drawings/plans/specs?

Aug 5, 2025 4:48 PM

Answered: All drawings and specifications have been uploaded on OpenGov.

Aug 6, 2025 5:09 PM

7. No subject

Aug 7, 2025 7:59 AM

Question: How can we get an "approved form" for the Bid Bond? I understand that the proposal should be accompanied by a certified or cashier's check or by a Bid Bond made payable to the City of Pembroke Pines.

Aug 7, 2025 7:59 AM

Answered: The City does not have a bond form. A standard industry form such as the AIA Document A310-2010 is typically acceptable and appropriate to submit with your proposal.

Aug 19, 2025 11:29 AM

8. No subject

Aug 7, 2025 8:55 AM

Question: Are we providing new variable frequency drives? Under 4.5 New Installation, it's asking for new variable frequency drives inside the existing mechanical room. However, the plan notes state that we are using existing disconnect switches and variable frequency drives.

Aug 7, 2025 8:55 AM

Answered: Existing variable frequency drives are to remain; contractors are to follow plan notes.

Aug 19, 2025 3:28 PM

9. Site Visit Items

Aug 6, 2025 1:58 PM

Question: During the site visit, some items were noted as not needed for the job: 1. Provide new 1" type "L" copper make up water piping to each cooling tower. Provide new shut off valves and flex connectors accordingly. Yes or No? 2. Install new variable frequency drives inside the existing mechanical room in location coordinated with facility manager. Provide all load and line side wiring and conduit as required. Yes or No? 3. Concrete repairs to the cooling tower base will take a several days and the concrete has a curing time before accepting the load. All this will increment the down time for the job. Are you considering a temporary chiller to keep the building operational. Yes or No? if yes, a) Who will provide the rental chiller, The City or the contractor? 4. Waterproofing instructions for the concrete basin walls. Type of sealer and application. 5. Juan Gonzalez from Tom Barrow is not providing the cost of the cooling towers and we need to calculate the entire cost of the project for the Bonding with time enough to submit the bid. 6. Considering all this, can you extend the bid due date?

Aug 6, 2025 1:58 PM

Answered: 1. Existing pvc make-up water line to remain, contractors are to follow plan notes. 2. Existing variable frequency drives are to remain; contractors are to follow plan notes. 3. Yes, the City is requesting that bidders include a temporary cooling tower. See addendum for temporary cooling tower specifications. a) The Contractor shall be responsible for providing a temporary cooling tower for the

duration of construction, until final completion. This temporary cooling tower must meet all specifications as detailed in Addendum #, City strongly recommends using the manufacturer's recommendation for the temporary cooling tower. The Contractor is responsible for all necessary connections and supplementary work to ensure the temporary cooling tower operates safely and properly. This includes, but is not limited to, all electrical and makeup water connections. Photos of the existing electrical and water connections have been provided for reference. 4. The Contractor shall apply a waterproof lining to the water basin using Sikagard 7600 VG. The application process will strictly adhere to the manufacturer's specified procedures. This includes all preparatory steps, such as pressure washing the water basin, to ensure correct and effective epoxy adhesion. 5. Please be advised that the bid has already been extended and as of today it will not be extended any further from the current bid due date.

Aug 19, 2025 3:28 PM

10. Question regarding form 16.2

Aug 18, 2025 4:09 PM

Question: We are in the process of filling out the forms and came upon 16.2 asking / stating that we need to be active and registered with SAM.gov. Is this needed and required?

Aug 18, 2025 4:09 PM

Answered: Section 16.2 of the bid package clearly indicates that this is needed. All vendors submitting bids for this project must be registered and active in the System for Award Management (SAM.gov) at the time of bid award. This is a federal requirement for entities receiving federal funds, including contracts, grants, or other financial assistance. Registration on SAM.gov ensures that vendors are eligible to do business with the U.S. government and are not suspended, debarred, or otherwise excluded from participation in federal programs. SAM registration is free and can be completed at <https://sam.gov>. Bidders must provide their Unique Entity ID (UEI) and proof of active registration as part of their proposal.

Aug 20, 2025 8:51 AM

11. No subject

Aug 20, 2025 9:56 AM

Question: The Contractor shall apply a waterproof lining to the water basin using Sikagard 7600 VG. The application process will strictly adhere to the manufacturer's specified procedures. This includes all preparatory steps, such as pressure washing the water basin, to ensure correct and effective epoxy adhesion. Is Sikagard 7600 VG the only acceptable waterproof lining?

Aug 20, 2025 9:56 AM

Answered: To submit an alternate product, a bidder must first provide a base bid using the specified Sikagard 7600 VG. This ensures that the City has a baseline cost and a bid that meets the stated

requirements. For the alternate product to be considered, it must meet or exceed the specifications of Sikagard 7600 VG and is subject to the approval of the City. The bidder is also required to specify the cost savings associated with the alternate product.

Aug 25, 2025 5:33 PM