



CONSTRUCTION

AT PC WE GO ABOVE AND BEYOND ON EVERY JOB, PERIOD.

November 29, 2016

Mr. Robert C. Carrier
Joint Building Committee Chair
DHS-CTC Building Project
McConnell Center
61 Locust St, Suite 409
Dover, NH 03820

Re: Letter of Recommendation – BP 23.2 Automatic Temperature Controls
Dover High School & Career Technical Center
PC Project No. 15027

Dear Robert:

Listed below are the bid results for the above referenced procurement package.

Bidders	Bid Amount
Siemens Industry Inc	\$ 810,110
Control Technologies Inc.	\$ 826,650
ENE Systems	\$ 898,322
Howse Corp	\$1,026,000
Trane	\$1,385,500
Scope Adjustments to Base Bid:	
Delete monitoring for air flow stations in air handling units	(\$ 18,445)
Remove coordination allowance from scope	(\$ 25,000)
Recommended subcontract value	\$ 766,665

Based upon our final analysis, we recommend the work be awarded to Siemens Industry Inc. We request your authorization by signature below to notify Siemens Industry Inc. that they are the apparent low bidder and that we will enter into a contract in the amount of \$766,665 with Siemens Industry Inc.

Sincerely,

Joint Building Committee

Scott Blair
Project Manager

Authorization

Date

cc: Garret Bertolini
Joe Picoraro
Melissa Henerberry (JBC)
Laura Wernick
Tina Stanislaski
Bobby Williams

[illegible]

Bid Form
Bid Package No. 23.2
Automatic Temperature Controls

Project: Dover High School and Career Technical Center
Bid Date: September 15, 2016
Bid Time: 11: 00 AM

To: Scott Blair
PC Construction Company
25 Alumni Drive
Dover, NH 03820

BIDDER: Siemens Industry Inc
(Company Name)

ADDENDA

Bidder acknowledges receipt of Addenda # A, # B, # , # , # , #

BASE BID

Eight Hundred Twenty Nine Thousand One Hundred Ten
DOLLARS, \$ 810,110
(In Words)

EMR

Current EMR rating .51

BREAKOUT PRICING

\$ <u>51,497</u>	Submittals and Approval
\$ <u>468,420</u>	Equipment and Installation
\$ <u>198,140</u>	Start-up, Commissioning and Training
\$ <u>0</u>	Progress Clean-up
\$ <u>5400</u>	Firestopping
\$ <u>54,400</u>	Project Management
\$ <u>32,253</u>	Cost of Bond (included in Base Bid) + Contingency
\$ <u>810,110</u>	TOTAL (Same as Base Bid above)

TOTAL MANHOURS

Total man-hours figured in the base project # 3832 On site man hours

Proposed crew hours and equipment:

List all jobs working on concurrently to the work schedule for this scope:

MINORITY/WOMEN BUSINESS ENTERPRISE

Is this bidder a qualified MWBE? **YES/NO** No

Are any subcontractors affiliated with this bidder a qualified MWBE? **YES/NO** No

If yes to either of the questions above; please provide accredited documentation upon award.

VALUE ENGINEERING List below any value engineering proposals you may.

Description	\$ Amount
1. Tie in with Existing Siemens Apogee System	2,445.00
2. Monitoring of Fire/Smoke Dampers by Fire Alarm with	
run or shutdown signal being provided to Siemens system	5,172.00
3.	

EXCEPTIONS, IF ANY List any clarifications or exceptions to the scope of work, terms and conditions, or other requirements under the Bid Package. Be specific and indicate items such as specific spec section and paragraph, attachment form number, name and paragraph, etc.

See Attached Scope sheet

ADDITIONAL INFORMATION

Names of any second-tier subcontractors or major suppliers Bidder intends to use:

TBD

RO

Names of key personnel including projects of a similar size and nature performed by each person
PROJECT MANAGER

Project	Location
Bob Viola	

ONSITE SUPERVISOR

Project	Location
Tim Walsh	

AWARD

The Bidder acknowledges and understands that PC Construction Company reserves the right to reject any or all Bids, to waive any informality in any Bid, and generally take such action as shall be in the Owner's and PC Construction Company's best interest.

INSURANCE REQUIREMENTS

Bidder has verified with insurance carrier that they can meet all PC requirements as called out on the attached sample certificate of insurance.

PAYMENT AND PRICING TERMS

Bidder acknowledges that subcontract, if awarded, will be subject to the following payment and pricing terms.

- a. A payment and performance bond is a requirement for all subcontractors whose contract value is in excess of \$100,000. For bid responses greater than \$100,000, the cost for the payment and performance bond must be identified separately as shown on the bid response form and also included in the total bid amount. For bid responses with an amount less than \$100,000, an add-alternate cost for a bond must be provided. PC reserves the right to require a bond on any subcontractor, regardless of contract amount.
- b. Subcontractor to submit schedule of values to be approved by the Project Manager prior to the first payment.
- c. Payment will be made in accordance with Article 9 of the P220 Subcontract Terms and Conditions, with 5% retainage.
- d. To receive payment for the month's work, subcontractor must submit a requisition and a properly executed Waiver of Lien and Release of Claim (Form P-235) on or before the 25th of each month for work completed through the last day of the month. Payments will be forwarded to subcontractors by the last business day of each month.
- e. This project is tax exempt. State and Local Taxes are not to be included.

f. HOURLY RATE PRICING.

For the purpose of evaluating or determining the cost of any additional work list hourly rates. Rates should include all costs including benefits, insurances, OH&P, etc. Rates shall be in effect for the duration of the project. Hourly Rates may be used in determining award of this subcontract.

Position	Hourly Rate	Premium Rate*	Overtime Rate**	Deduct Rate
Technician	125.50	138.05	188.25	N/A

Electrician	65.00	71.50	97.50	N/A
Engineer	135.00	N/A	N/A	N/A
Project Manager	152.00	N/A	N/A	N/A

*Premium Rate is off hours, not overtime

** Overtime Rate should reflect time and one half on the base hourly rate. Overtime Rate does not apply until 40 hours are worked, on this project, in a given week.

Deduct Rate shall be used for any reductions in scope made throughout the course of the project.

Mark up on change orders will be as follows. These markups also apply to any vendors and second tier subcontractors used on the project.

MATERIAL - Invoice cost plus 10% overhead and profit.

EQUIPMENT - Rental invoice cost plus 10% overhead and profit, or if owned equipment Bluebook rate without any additional mark up.

SECOND TIER SUBCONTRACTOR - Second tier subcontractor cost plus 5% overhead and profit.

g. UNIT PRICING.

For the purpose of evaluating or determining the cost of any additional work list unit prices for each item below. Unit prices are the installed price, unless noted otherwise, and should include all costs including overhead and profit.

\$ 275 Modulating Control Valve (\$ ea) 1/2" valve with 25' of wiring plenum rated

\$ 1450 VAV Controller (\$ ea) VAV with HWRH Damper Actuator Space Temp Control Valve

ATTACHMENTS INCORPORATED HEREIN BY REFERENCE

Bidder to initial next to each attachment representing that he has thoroughly examined each Attachment, that the amounts on the Bid Form reflect any and all costs associated with complying with terms, conditions and other requirements of the Attachments, and further represents that the bidder can and will enter into a subcontract, if awarded, that is subject to the same.

Initial

☐ Jobsite Orientations
☐ Sample Insurance Certificate
☐ AIA Sample Form
☐ E018b.Policy Regarding Discrimination and Harassment and Equal Employment Opportunity - Bilingual
☐ P220.Subcontract Terms and Conditions
☐ P220A.Subcontractor Safety Agreement
☐ P235.Waiver of Lien and Release of Claim
☐ P350.Subcontract Performance Bond
☐ P355.Subcontract Labor and Material Payment Bond
☐ SF060.Subcontractor Safety and Health Questionnaire
☐ Bid Schedule 081816
☐ 081216 Construction Drawings Volumes 1 thru 4
☐ 081216 Construction Specifications Volumes 1 & 2
☐ MEP Spatial Coordination Plan
☐ Project Specific Requirements

The undersigned agrees that Bidder shall enter into a subcontract, if awarded, in accordance with this Bid Package and subject to the terms, conditions, and other requirements of the Attachments hereto and of the Contract Documents, and shall do so within five days of receipt of said subcontract.

Company Name: Siemens Industry Inc

By: Rocco Derrigo

Title: Area Sales Manager

Date: 9/15/2016

A handwritten signature in blue ink, consisting of a stylized 'R' or similar character, written over a horizontal line.

Scott Blair

From: Alix, Robert <robert.alix@siemens.com>
Sent: Tuesday, October 18, 2016 4:01 PM
To: Scott Blair
Subject: RE: Dover HS & CTC VE Items

Scott,

Here are the deducts for the VE items.

1. Eliminate CO2 and Humidity monitoring at all spaces except Auditorium, Gymnasium and Town Square. **Deduct \$32,000.00**
2. Delete feedback status on control valves. **Deduct \$2400. It is only for the boiler and chiller plant. The feedback on the terminal boxes is done through software in the controller. So there is not savings.**
3. Delete weather station. **Deduct \$1905.00**
4. Delete on-site server and utilize Owner's virtual server. **Deduct \$3,160.00**
5. Delete monitoring of flow stations on RTU's (Trane has given me a number to delete their flow stations) **Deduct \$18,445.00**

Rob Alix
Sales Executive

Siemens Industry, Inc.

Building Technologies Division
Two International Drive, Suite 350
Portsmouth, NH 03801

Cell: 781 375 6995

robert.alix@siemens.com

From: Scott Blair [mailto:sblair@pcconstruction.com]
Sent: Friday, October 14, 2016 4:30 PM
To: Alix, Robert (RC-US BT FLD Z9 S-SOL)
Subject: Dover HS & CTC VE Items

Rob,

Bid Package No. 23.2
Automatic Temperature Controls

Project: Dover High School and Career Technical Center
Bid Date: September 15, 2016
Bid Time: 11: 00 AM

To: Scott Blair
PC Construction Company
25 Alumni Drive
Dover, NH 03820

BIDDER: **Control Technologies Inc.**
(Company Name)

ADDENDA

Bidder acknowledges receipt of Addenda # A, # B, # , # , # , #

BASE BID

Eight Hundred Fifteen Thousand Dollars. DOLLARS, \$ **815,000**
(In Words)

EMR

Current EMR rating 1.21

BREAKOUT PRICING

\$ <u>9,600</u>	Submittals and Approval
\$ <u>578,500</u>	Equipment and Installation
\$ <u>147,000</u>	Start-up, Commissioning and Training
\$ <u>Included in Equip & Install</u>	Progress Clean-up
\$ <u>8,000</u>	Firestopping
\$ <u>34,000</u>	Project Management (includes foreman meeting attendance)
\$ <u>12,900</u>	Cost of Bond (included in Base Bid)
\$ 25,000	Allowance (added line item)
\$ <u>815,000</u>	TOTAL (Same as Base Bid above)

TOTAL MANHOURS

Total man-hours figured in the base project # 6,300

Proposed crew hours and equipment:

2-4 Electricians
2-3 Programmers
Man lifts

List all jobs working on concurrently to the work schedule for this scope:

Numerous projects ranging from \$20,000 to \$100,000. No multiyear projects of this magnitude overlap this project schedule.

MINORITY/WOMEN BUSINESS ENTERPRISE

Is this bidder a qualified MWBE? **YES/NO** _____

Are any subcontractors affiliated with this bidder a qualified MWBE? **YES/NO** _____

If yes to either of the questions above; please provide accredited documentation upon award.

VALUE ENGINEERING List below any value engineering proposals you may.

Description	\$ Amount
1. Deduct \$22,670 Remove feedback monitoring on modulating control valves. This allows us to furnish a more cost effective and more efficient capacitive (no spring) return control ball valve which greatly reduces energy consumption.	
2. Deduct \$1,470 Remove PC server and utilize customer provided Virtual Server.	
3. Deduct \$63,075 Remove VAV space CO2 and Humidity sensors and Remove IU space CO2.	
4. Deduct \$5,250 Remove all Airflow Stations.	

EXCEPTIONS, IF ANY List any clarifications or exceptions to the scope of work, terms and conditions, or other requirements under the Bid Package. Be specific and indicate items such as specific spec section and paragraph, attachment form number, name and paragraph, etc.

1. Furnishing access doors as specified in line 18 of Bid Package 22.3
2. Work outside of normal business hours or outside of the provided project schedule.
3. Furnishing Cold Water Makeup BTU meter. This is actually a flow meter provided by division 220000.
4. Exclude integrating to Trane programmable DDC controllers provided with equipment unless specified to be provided with equipment and shown as an integration on the control diagrams as this contradicts specification 230000 2.23 H requiring Stand-Alone DDC controllers.
5. Furnishing modulating control valves show in Typical Boiler Piping Detail on sheet M3.2 as this valve isn't shown on M3.7 Hot Water Piping Diagram or M4.1 Boiler Plant Control diagram.
6. Furnishing and installing RTU isolation damper actuators as noted in RTU specification 230000 paragraph 2.14 N as these dampers aren't shown on the duct plans, M3.5 and M3.6 Flow Diagrams, or on M4.2~M4.6 control diagrams.
7. Exclude line voltage wiring of fire smoke dampers. Final connection to be by division 260000.

ADDITIONAL INFORMATION

Names of any second-tier subcontractors or major suppliers Bidder intends to use:

N/A _____

Names of key personnel including projects of a similar size and nature performed by each person

Project Manager: Mark Stanieich

Project Reference	Location
Nashua High North and South (2 projects)	Nashua, NH
Portsmouth Middle School	Portsmouth, NH
Idlehurst Elementary School	Somersworth, NH

Onsite Supervisor: Michael Vachon

Nashua High North and South (2 projects)	Nashua, NH
Fairground Elementary School	Portsmouth, NH
Portsmouth Middle School	Portsmouth, NH

AWARD

The Bidder acknowledges and understands that PC Construction Company reserves the right to reject any or all Bids, to waive any informality in any Bid, and generally take such action as shall be in the Owner's and PC Construction Company's best interest.

INSURANCE REQUIREMENTS

Bidder has verified with insurance carrier that they can meet all PC requirements as called out on the attached sample certificate of insurance.

PAYMENT AND PRICING TERMS

Bidder acknowledges that subcontract, if awarded, will be subject to the following payment and pricing terms.

- a. A payment and performance bond is a requirement for all subcontractors whose contract value is in excess of \$100,000. For bid responses greater than \$100,000, the cost for the payment and performance bond must be identified separately as shown on the bid response form and also included in the total bid amount. For bid responses with an amount less than \$100,000, an add-alternate cost for a bond must be provided. PC reserves the right to require a bond on any subcontractor, regardless of contract amount.
- b. Subcontractor to submit schedule of values to be approved by the Project Manager prior to the first payment.
- c. Payment will be made in accordance with Article 9 of the P220 Subcontract Terms and Conditions, with 5% retainage.
- d. To receive payment for the month's work, subcontractor must submit a requisition and a properly executed Waiver of Lien and Release of Claim (Form P-235) on or before the 25th of each month for work completed through the last day of the month. Payments will be forwarded to subcontractors by the last business day of each month.
- e. This project is tax exempt. State and Local Taxes are not to be included.

f. HOURLY RATE PRICING.

For the purpose of evaluating or determining the cost of any additional work list hourly rates. Rates should include all

costs including benefits, insurances, OH&P, etc. Rates shall be in effect for the duration of the project. Hourly Rates may be used in determining award of this subcontract.

Position	Hourly Rate	Premium Rate*	Overtime Rate **	Deduct Rate
Electrician	\$84.00	\$92.40	\$126.00	\$84.00
Foreman	\$98.00	\$107.80	\$147.00	\$98.00
Programmer	\$98.00	\$107.80	\$147.00	\$98.00
Project Manager	\$98.00	\$107.80	\$147.00	\$98.00
Engineer	\$98.00	\$107.80	\$147.00	\$98.00

*Premium Rate is off hours, not overtime

** Overtime Rate should reflect time and one half on the base hourly rate. Overtime Rate does not apply until 40 hours are worked, on this project, in a given week.

Deduct Rate shall be used for any reductions in scope made throughout the course of the project.

Mark up on change orders will be as follows. These markups also apply to any vendors and second tier subcontractors used on the project.

MATERIAL - Invoice cost plus 10% overhead and profit.

EQUIPMENT - Rental invoice cost plus 10% overhead and profit, or if owned equipment Bluebook rate without any additional mark up.

SECOND TIER SUBCONTRACTOR - Second tier subcontractor cost plus 5% overhead and profit.

g. UNIT PRICING.

For the purpose of evaluating or determining the cost of any additional work list unit prices for each item below. Unit prices are the installed price, unless noted otherwise, and should include all costs including overhead and profit.

\$ 505 Modulating Control Valve (\$ ea) (with feedback and 30' of open cable)

\$ 1,050 VAV Controller (\$ ea) (with space temperature, humidity and CO2 combination sensor)

ATTACHMENTS INCORPORATED HEREIN BY REFERENCE

Bidder to initial next to each attachment representing that he has thoroughly examined each Attachment, that the amounts on the Bid Form reflect any and all costs associated with complying with terms, conditions and other requirements of the Attachments, and further represents that the bidder can and will enter into a subcontract, if awarded, that is subject to the same.

Initial

CPC Jobsite Orientations
CPC Sample Insurance Certificate
CPC AIA Sample Form
CPC E018b.Policy Regarding Discrimination and Harassment and Equal Employment Opportunity - Bilingual
CPC P220.Subcontract Terms and Conditions
CPC P220A.Subcontractor Safety Agreement
CPC P235.Waiver of Lien and Release of Claim
CPC P350.Subcontract Performance Bond
CPC P355.Subcontract Labor and Material Payment Bond
CPC SF060.Subcontractor Safety and Health Questionnaire
CPC Bid Schedule 081816
CPC 081216 Construction Drawings Volumes 1 thru 4

CPC 081216 Construction Drawings Volumes 1 thru 4
CPC 081216 Construction Specifications Volumes 1 & 2
CPC MEP Spatial Coordination Plan
CPC Project Specific Requirements

The undersigned agrees that Bidder shall enter into a subcontract, if awarded, in accordance with this Bid Package and subject to the terms, conditions, and other requirements of the Attachments hereto and of the Contract Documents, and shall do so within five days of receipt of said subcontract.

Company Name: Control Technologies Inc.

By: Chris Clorite

Title: Sales Engineer

Date: 10/28/2016

Alternates:

1. Bid package 23.2 Automatic Temperature Controls states to provide the **fire smoke dampers** but the fire smoke dampers are specified in division 230000 2.22 C and are by 230000 per the trade responsibility matrix. **Add \$23,500** to provide Fire Smoke dampers as specified in 230000 2.22 C. Damper actuators to have end switches which aren't specified but are required for DDC monitoring per sheet M4.8.
2. Bid package 23.2 Automatic Temperature Controls states to provide the **VFDs** not coming with package equipment, as does the responsibility matrix but the VFDs are specified in division 260000 paragraph 2.22. **Add \$11,650** to provide 4 pump VFDs that meet specified specification section 260000 2.22. RTUs and HVs are specified to be provided with VFDs.
3. Trade Responsibility Matrix states to that **Hydronic Energy Meters** are to be provided by division 230000. These meters are located in specification section 230000 paragraph 2.23 T.1 (ATC Spec) and are included in this proposal. **Deduct \$6,650** to remove Heating Hot Water and Cooling Chilled Water BTU Meters. Turbine insertion meters are estimated. Exclude strap on ultrasonic meters as specified as these are typically for old work installations. Price can be provided if desired.

See Attached proposal for details and clarifications about each system.

Bid Form
Bid Package No. 23.2
Automatic Temperature Controls

Project: Dover High School and Career Technical Center
Bid Date: September 13, 2016
Bid Time: 11:00 AM

To: Scott Blair
PC Construction Company
25 Alumni Drive
Dover, NH 03820

BIDDER: ENE SYSTEMS OF NH
(Company Name)

ADDENDA

Bidder acknowledges receipt of Addenda # A, # B, # _____, # _____, # _____, # _____

BASE BID

EIGHT HUNDRED + EIGHTY SEVEN THOUSAND + FOUR HUNDRED
(In Words) DOLLARS, \$ 887,400

EMR

Current EMR rating 95

BREAKOUT PRICING

\$ <u>26,000</u>	Submittals and Approval
\$ <u>727,230</u>	Equipment and Installation
\$ <u>83,400</u>	Start-up, Commissioning and Training
\$ <u>8,000</u>	Progress Clean-up
\$ <u>6,700</u>	Firestopping
\$ <u>22,750</u>	Project Management
\$ <u>13,320</u>	Cost of Bond (included in Base Bid)
\$ <u>887,400</u>	TOTAL (Same as Base Bid above)

TOTAL MANHOURS

Total man-hours figured in the base project # 5340

Proposed crew hours and equipment:

List all jobs working on concurrently to the work schedule for this scope:

N/A

MINORITY/WOMEN BUSINESS ENTERPRISE

Is this bidder a qualified MWBE? YES/NO NO

Are any subcontractors affiliated with this bidder a qualified MWBE? YES/NO NO

If yes to either of the questions above; please provide accredited documentation upon award.

VALUE ENGINEERING List below any value engineering proposals you may.

Description	\$ Amount
1. _____	_____
2. _____	_____
3. _____	_____

EXCEPTIONS, IF ANY List any clarifications or exceptions to the scope of work, terms and conditions, or other requirements under the Bid Package. Be specific and indicate items such as specific spec section and paragraph, attachment form number, name and paragraph, etc.

SEE ATTACHED QUOTE LETTER

ADDITIONAL INFORMATION

Names of any second-tier subcontractors or major suppliers Bidder intends to use:

SCHNEIDER ELECTRIC, BELIMO, RELIABLE

Names of key personnel including projects of a similar size and nature performed by each person

PROJECT MANAGER

<u>RICHARD OLSON</u>	<u>SAID</u>
Project	Location
<u>SANBORN HIGH</u>	<u>SANBORN NH</u>
<u>WINDHAM HIGH</u>	<u>WINDHAM NH</u>
<u>FALL MNT HIGH</u>	<u>LANGDON, NH</u>

ONSITE SUPERVISOR

<u>ROBERT BATCHELDER</u>	
Project	Location
<u>SANBORN HIGH</u>	<u>SANBORN, NH</u>
<u>WINDHAM HIGH</u>	<u>WINDHAM, NH</u>
<u>FALL MOUNTAIN HIGH</u>	<u>LANGDON, NH</u>

AWARD

The Bidder acknowledges and understands that PC Construction Company reserves the right to reject any or all Bids, to waive any informality in any Bid, and generally take such action as shall be in the Owner's and PC Construction Company's best interest.

INSURANCE REQUIREMENTS

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e. This project is tax exempt. State and Local Taxes are not to be included.

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For the purpose of evaluating or determining the cost of any additional work list hourly rates. Rates should include all costs including benefits, insurances, OH&P, etc. Rates shall be in effect for the duration of the project. Hourly Rates may be used in determining award of this subcontract.

Position	Hourly Rate	Premium Rate*	Overtime Rate**	Deduct Rate
<u>INSTALLER</u>	<u>90</u>	<u>95 95</u>	<u>135</u>	<u>90 90</u>

TECHNICIAN	90	95	135	90

*Premium Rate is off hours, not overtime

** Overtime Rate should reflect time and one half on the base hourly rate. Overtime Rate does not apply until 40 hours are worked, on this project, in a given week.

Deduct Rate shall be used for any reductions in scope made throughout the course of the project.

Mark up on change orders will be as follows. These markups also apply to any vendors and second tier subcontractors used on the project.

MATERIAL - Invoice cost plus 10% overhead and profit.

EQUIPMENT - Rental invoice cost plus 10% overhead and profit, or if owned equipment Bluebook rate without any additional mark up.

SECOND TIER SUBCONTRACTOR - Second tier subcontractor cost plus 5% overhead and profit.

g. UNIT PRICING.

For the purpose of evaluating or determining the cost of any additional work list unit prices for each item below. Unit prices are the installed price, unless noted otherwise, and should include all costs including overhead and profit.

\$ 180.77 Modulating Control Valve (\$ ea)

\$ 1,150 VAV Controller (\$ ea)

ATTACHMENTS INCORPORATED HEREIN BY REFERENCE

Bidder to initial next to each attachment representing that he has thoroughly examined each Attachment, that the amounts on the Bid Form reflect any and all costs associated with complying with terms, conditions and other requirements of the Attachments, and further represents that the bidder can and will enter into a subcontract, if awarded, that is subject to the same.

Initial

<u>RO</u>	Jobsite Orientations
<u>RO</u>	Sample Insurance Certificate
<u>RO</u>	AIA Sample Form
<u>RO</u>	E018b.Policy Regarding Discrimination and Harassment and Equal Employment Opportunity - Bilingual
<u>RO</u>	P220.Subcontract Terms and Conditions
<u>RO</u>	P220A.Subcontractor Safety Agreement
<u>RO</u>	P235.Waiver of Lien and Release of Claim
<u>RO</u>	P350.Subcontract Performance Bond
<u>RO</u>	P355.Subcontract Labor and Material Payment Bond
<u>RO</u>	SF060.Subcontractor Safety and Health Questionnaire
<u>RO</u>	Bid Schedule 081816
<u>RO</u>	081216 Construction Drawings Volumes 1 thru 4
<u>RO</u>	081216 Construction Specifications Volumes 1 & 2
<u>RO</u>	MEP Spatial Coordination Plan
<u>RO</u>	Project Specific Requirements

The undersigned agrees that Bidder shall enter into a subcontract, if awarded, in accordance with this Bid Package and subject to the terms, conditions, and other requirements of the Attachments hereto and of the Contract Documents, and shall do so within five days of receipt of said subcontract.

Company Name: ENE SYSTEMS OF PH

By: [Signature]

Title:

President

Date:

9/15/14

Date: 9-15-16

To: Scott Blair

Of: PC Construction Inc.

Re: Dover High School – Dover, NH

Scope of Work: The control system be installed per mechanical drawings M1.0A, M1.0b, M1.0C, M1.0F, M1.1A, M1.1B, M1.1C, M1.1D, M1.1E, M1.1F, M1.2A, M1.2B, M1.2C, M1.2D, M1.2E, M1.2F, M1.3A, M1.3B, M1.3C, M1.3D, M1.3E, M1.3F, M2.0A, M2.0B, M2.0C, M2.0F, M2.1A, M2.1B, M2.1C, M2.1D, M2.1E, M2.1F, M2.2A, M2.2B, M2.2C, M2.2D, M2.2E, M2.2F, M3.0, M3.1, M3.2, M3.3, M3.4, M3.5, M3.6, M3.7, M4.0, M4.1, M4.2, M4.3, M4.4, M4.5, M4.6, M4.7, M4.8, M4.9, VEM.1, and VS.1 dated 8/25/16 per revision A and specification section 230000 pages 93 through 119 and addendum #A dated 9/6/16 and #B dated 9/2/16 with RF-028 and RFI 039 dated 9/2/16 with the following clarifications / exclusions

1. The control system will be a Web enabled DDC system utilizing the Tridium AX platform. A workstation server is included to host the enterprise software, collect trend logs, and manage system alarms. A laptop computer loaded with the system commissioning software is also included. Required interface connectors are also included.
1. Bacnet compliant DDC controls and associated low voltage interlock wiring serving nineteen (19) rooftop units are included. Integration to the manufacturer provided controls for the rooftop heating and cooling sections is included. Air flow measuring stations are by the rooftop unit manufacturer and are excluded. Interlock wiring of these stations to the BMS system is included. All dampers serving these units are by the unit manufacturer and are excluded. Modulating damper actuators serving these dampers are included. Installation of these actuators is included.
2. Bacnet compliant DDC controls and associated low voltage interlock wiring serving five (5) rooftop H & V units are included. Integration to the manufacturer provided controls for the units heating section is included. Air flow measuring stations are by the rooftop unit manufacturer and are excluded. Interlock wiring of these stations to the BMS system is included. All dampers serving these units are by the unit manufacturer and are excluded. Modulating damper actuators serving these dampers are included. Installation of these actuators is included.
3. Bacnet compliant DDC controls and associated low voltage interlock wiring serving MUA-1 and MUA-2 are included. Outside air intake dampers are by others and are excluded. Two-position damper actuators serving these dampers are included. Space carbon monoxide transmitters are included. Interlocking to manufacturer provided gas solenoids is included. Interlocking to fire suppression (Ansul) system is included.
4. Bacnet compliant DDC controls and associated low voltage interlock wiring serving the boiler plant and associated pumps are included. Integration into manufacturer provided Modbus / Bacnet controls is also included. Variable frequency drives are by others and are excluded See add price below. System differential pressure control of the main loop pumps is included. Water leak detection of the mechanical room 043 floor is also included. Alarm horn and strobe light are included.
5. Bacnet compliant DDC controls and associated low voltage interlock wiring serving the chilled water plant and associated pumps are included. Integration into manufacturer provided Modbus / Bacnet controls is also included. Variable frequency drives are by others and are excluded. See add price below. System differential pressure control of the main loop pumps is included.
6. Bacnet compliant DDC controls and associated low voltage interlock wiring serving one hundred eighty-nine (189) variable air volume boxes are included. Modulating control valves for associated reheat coils are included. Two-position control valves serving associated radiant ceiling panels are included. Multi-function (Temperature, humidity, and CO2) room sensors are included.
7. Bacnet compliant DDC controls and associated low voltage interlock wiring serving fifty-seven (57) induction units are included. Modulating chilled and hot water control valves are included. Two-position control valves serving associated radiant ceiling panels are included. Multi-function (Temperature, humidity, and CO2) room sensors are included.

8. Bacnet compliant DDC controls and associated low voltage interlock wiring serving forty-four (44) stand-alone radiant heating panels are included. Two-position control valves serving associated radiant ceiling panels are included. Multi-function (Temperature, humidity, and CO2) room sensors are included.
9. Bacnet compliant DDC controls and associated low voltage interlock wiring serving thirty-one (31) unit heaters are included. Modulating control valves are included.
10. Bacnet compliant DDC controls and associated low voltage interlock wiring serving the dust collector are included.
11. Bacnet compliant DDC controls and associated low voltage interlock wiring serving thirty-nine (39) exhaust fans are included. Motor operated dampers associated with these fans, both exhaust and return, are by the sheet metal subcontractor and are excluded. Interlock wiring to these dampers is included. See add price below.
12. Bacnet compliant DDC controls and associated low voltage interlock wiring serving the elevator machine room ventilation are included. The fire / smoke rated motor operated damper is by others and is excluded. Interlock wiring from the BMS to this damper is included.
13. A control system Kiosk is included.
14. Cold water make-up water flow meter is included. Installation of this meter is by others.
15. Installation of manufacturer provided controls and associated low voltage interlock wiring for twenty-six (26) ductless split systems is included. Integration to manufacturer provided Bacnet communication panel is included. Low voltage interlock wiring to remote condensing units is included.
16. Integration to electric power meters provided by others is included.
17. Integration to gas meters provided by other is included.
18. Integration to lighting control panel provided by the electrical contractor is included.
19. All miscellaneous monitoring points described on the mechanical drawings are included.
20. A bid and performance bond is included.
21. Fire stopping of all BMS penetrations is included.
22. One-year warranty is included.
23. All work will be performed during normal business hours of 7am to 3:30pm, Monday through Friday.
24. All smoke and fire dampers are excluded.

The price to perform this work is \$887,400.00

Add \$2,872.00 for motor operated dampers shown on the mechanical drawings serving exhaust fans.

Add \$4,650.00 for two 20hp, 480vac variable frequency drives as manufactured by Franklin Controls serving heating water pumps P-1 and P-2 per specification.

Add \$3,400.00 for two 10hp, 480vac variable frequency drives as manufactured by Franklin Controls serving chilled water pumps P-3 and P-4 per specification.

Sincerely,
Richard Olson

Bid Form
Bid Package No. 23.2
Automatic Temperature Controls

Project: Dover High School and Career Technical Center
Bid Date: September 13, 2016
Bid Time: 11:00 AM

To: Scott Blair
PC Construction Company
25 Alumni Drive
Dover, NH 03820

BIDDER: House Corporation, Inc.
(Company Name)

ADDENDA

Bidder acknowledges receipt of Addenda # A, # B, # _____, # _____, # _____, # _____

BASE BID

One Million twenty six thousand DOLLARS, \$ 1,026,000
(In Words)

EMR

Current EMR rating .86

BREAKOUT PRICING

\$ <u>20,400</u>	Submittals and Approval
\$ _____	Equipment and Installation
\$ <u>10,200 Cxing</u>	Start-up, Commissioning and Training
\$ <u>Included</u>	Progress Clean-up
\$ <u>Included</u>	Firestopping
\$ <u>Included</u>	Project Management
\$ <u>N/A</u>	Cost of Bond (included in Base Bid)
\$ <u>1,026,000</u>	TOTAL (Same as Base Bid above)

TOTAL MANHOURS

Total man-hours figured in the base project # 5,278 Installation, + Programming, Submittals,
Training, Cxing

Proposed crew hours and equipment:

List all jobs working on concurrently to the work schedule for this scope:

Winchester High School
Wilmington High School
Ayer/Shirley High School
PennBrook Elementary

MINORITY/WOMEN BUSINESS ENTERPRISE

Is this bidder a qualified MWBE? YES/NO NO

Are any subcontractors affiliated with this bidder a qualified MWBE? YES/NO NO

If yes to either of the questions above; please provide accredited documentation upon award.

VALUE ENGINEERING List below any value engineering proposals you may.

Description	\$ Amount
1. We should meet to discuss, Have several suggestions that you may be interested in.	_____
2. _____	_____
3. _____	_____

EXCEPTIONS, IF ANY List any clarifications or exceptions to the scope of work, terms and conditions, or other requirements under the Bid Package. Be specific and indicate items such as specific spec section and paragraph, attachment form number, name and paragraph, etc.

ADDITIONAL INFORMATION

Names of any second-tier subcontractors or major suppliers Bidder intends to use:

ALL Hardware is From FW Webb controls Division
They are the Johnson Controls Rep.

Names of key personnel including projects of a similar size and nature performed by each person
PROJECT MANAGER

Project	Location
Winchester High School	Winchester MA
Wilmington High School	Wilmington, MA
Ayer/Shirley High School	Ayer MA

ONSITE SUPERVISOR

Project	Location
Russell House	

AWARD

The Bidder acknowledges and understands that PC Construction Company reserves the right to reject any or all Bids, to waive any informality in any Bid, and generally take such action as shall be in the Owner's and PC Construction Company's best interest.

INSURANCE REQUIREMENTS

Bidder has verified with insurance carrier that they can meet all PC requirements as called out on the attached sample certificate of insurance.

PAYMENT AND PRICING TERMS

Bidder acknowledges that subcontract, if awarded, will be subject to the following payment and pricing terms.

a. A payment and performance bond is a requirement for all subcontractors whose contract value is in excess of \$100,000. For bid responses greater than \$100,000, the cost for the payment and performance bond must be identified separately as shown on the bid response form and also included in the total bid amount. For bid responses with an amount less than \$100,000, an add-alternate cost for a bond must be provided. PC reserves the right to require a bond on any subcontractor, regardless of contract amount.

b. Subcontractor to submit schedule of values to be approved by the Project Manager prior to the first payment.

c. Payment will be made in accordance with Article 9 of the P220 Subcontract Terms and Conditions, with 5% retainage.

d. To receive payment for the month's work, subcontractor must submit a requisition and a properly executed Waiver of Lien and Release of Claim (Form P-235) on or before the 25th of each month for work completed through the last day of the month. Payments will be forwarded to subcontractors by the last business day of each month.

e. This project is tax exempt. State and Local Taxes are not to be included.

f. HOURLY RATE PRICING.

For the purpose of evaluating or determining the cost of any additional work list hourly rates. Rates should include all costs including benefits, insurances, OH&P, etc. Rates shall be in effect for the duration of the project. Hourly Rates may be used in determining award of this subcontract.

Position	Hourly Rate	Premium Rate*	Overtime Rate**	Deduct Rate



*Premium Rate is off hours, not overtime

** Overtime Rate should reflect time and one half on the base hourly rate. Overtime Rate does not apply until 40 hours are worked, on this project, in a given week.

Deduct Rate shall be used for any reductions in scope made throughout the course of the project.

Mark up on change orders will be as follows. These markups also apply to any vendors and second tier subcontractors used on the project.

MATERIAL - Invoice cost plus 10% overhead and profit.

EQUIPMENT - Rental invoice cost plus 10% overhead and profit, or if owned equipment Bluebook rate without any additional mark up.

SECOND TIER SUBCONTRACTOR - Second tier subcontractor cost plus 5% overhead and profit.

g. UNIT PRICING.

For the purpose of evaluating or determining the cost of any additional work list unit prices for each item below. Unit prices are the installed price, unless noted otherwise, and should include all costs including overhead and profit.

\$_____ Modulating Control Valve (\$ ea)

\$_____ VAV Controller (\$ ea)

ATTACHMENTS INCORPORATED HEREIN BY REFERENCE

Bidder to initial next to each attachment representing that he has thoroughly examined each Attachment, that the amounts on the Bid Form reflect any and all costs associated with complying with terms, conditions and other requirements of the Attachments, and further represents that the bidder can and will enter into a subcontract, if awarded, that is subject to the same.

Initial

- _____ Jobsite Orientations
- _____ Sample Insurance Certificate
- _____ AIA Sample Form
- _____ E018b.Policy Regarding Discrimination and Harassment and Equal Employment Opportunity - Bilingual
- _____ P220.Subcontract Terms and Conditions
- _____ P220A.Subcontractor Safety Agreement
- _____ P235.Waiver of Lien and Release of Claim
- _____ P350.Subcontract Performance Bond
- _____ P355.Subcontract Labor and Material Payment Bond
- _____ SF060.Subcontractor Safety and Health Questionnaire
- _____ Bid Schedule 081816
- _____ 081216 Construction Drawings Volumes 1 thru 4
- _____ 081216 Construction Specifications Volumes 1 & 2
- _____ MEP Spatial Coordination Plan
- _____ Project Specific Requirements

The undersigned agrees that Bidder shall enter into a subcontract, if awarded, in accordance with this Bid Package and subject to the terms, conditions, and other requirements of the Attachments hereto and of the Contract Documents, and shall do so within five days of receipt of said subcontract.

Company Name: _____

By: _____

Title:

Date:

1. The first part of the document is a list of the names of the people who were present at the meeting. The names are listed in alphabetical order.

2. The second part of the document is a list of the topics that were discussed during the meeting. The topics are listed in alphabetical order.

3. The third part of the document is a list of the actions that were taken during the meeting. The actions are listed in alphabetical order.

4. The fourth part of the document is a list of the decisions that were made during the meeting. The decisions are listed in alphabetical order.

5. The fifth part of the document is a list of the recommendations that were made during the meeting. The recommendations are listed in alphabetical order.

6. The sixth part of the document is a list of the conclusions that were reached during the meeting. The conclusions are listed in alphabetical order.

7. The seventh part of the document is a list of the next steps that need to be taken. The next steps are listed in alphabetical order.

8. The eighth part of the document is a list of the people who are responsible for implementing the next steps. The people are listed in alphabetical order.

9. The ninth part of the document is a list of the dates when the next steps are to be completed. The dates are listed in alphabetical order.

10. The tenth part of the document is a list of the people who are to be contacted for more information. The people are listed in alphabetical order.

11. The eleventh part of the document is a list of the people who are to be kept informed of the progress of the next steps. The people are listed in alphabetical order.

12. The twelfth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

13. The thirteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

14. The fourteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

15. The fifteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

16. The sixteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

17. The seventeenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

18. The eighteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

19. The nineteenth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

20. The twentieth part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

21. The twenty-first part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

22. The twenty-second part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

23. The twenty-third part of the document is a list of the people who are to be thanked for their contribution to the meeting. The people are listed in alphabetical order.

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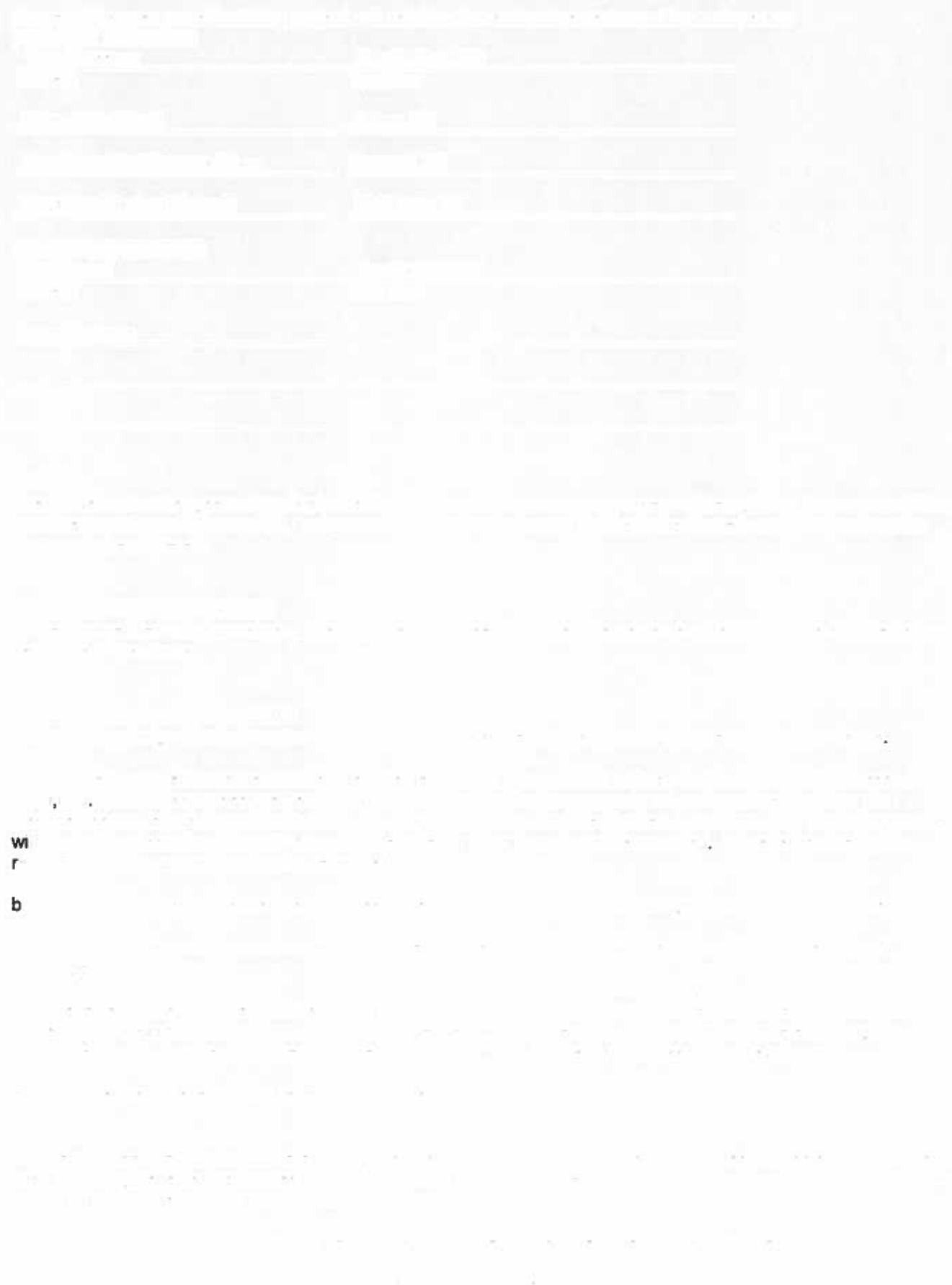


Figure 1. Spatial distribution of the proportion of the population aged 65 and over in 2000. (a) United Kingdom, Ireland, and the Republic of Ireland. (b) United Kingdom, Ireland, and the Republic of Ireland.

