



State of New Hampshire

DEPARTMENT OF ADMINISTRATIVE SERVICES

25 Capitol Street – Room 120
Concord, New Hampshire 03301

Charles M. Arlinghaus
Commissioner
(603) 271-3201

Joseph B. Bouchard
Assistant Commissioner
(603) 271-3204

Catherine A. Keane
Deputy Commissioner
(603) 271-2059

Division of Public Works
Design and Construction
Project No. 80970– Contract D

March 22, 2021

His Excellency, Governor Christopher T. Sununu
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Administrative Services (DAS), Division of Public Works (DPW) to enter into a **Sole Source** contract amendment with RTH Mechanical Contractors, Inc. (VC#277973 B001), 99 Pine Road, Brentwood, NH for work related to the Air Handling System at the NH Hospital, Concord, NH by increasing the price limitation by \$1,296,533.34, from \$2,828,320 to \$4,124,853.34. Effective upon the Governor's approval through June 30, 2021. **Funding Source:**
100% Federal Funds

Funding is available in the SFY2021 Operating Budget as follows:

05-095-940010-094-19020000 HHS: NH Hospital-Cares Hospital Provider Relief

048-500226 Contractual Maint Build-Grn-Contract Repairs; Bldg.Grounds
Activity Code: JN94094050

SFY2021
\$1,296,533.34


EXPLANATION

The Department of Health and Human Services is proposing to use CARES Act Provider Relief Funds to improve infection control measures at New Hampshire Hospital. These funds were paid directly to New Hampshire Hospital from The Centers for Medicare and Medicaid Services (CMS) to reimburse eligible healthcare providers for healthcare related expenses attributed to the corona virus. Making facility improvements to meet new infection control standards is an appropriate use of these funds.

The ductwork is dirty and needs to be cleaned. There is insulation on the ductwork that is failing and needs to be replaced. Testing and balancing will ensure that the ductwork system is functioning properly and will identify additional areas in need of repairs/adjustments. The proposed UVC germicidal fixtures will clean and disinfect the air at NH Hospital. This will not only improve infection control, it will also extend the life of the blowers, eliminate costly cleaning of the coils and improve the cooling efficiency.

This amendment is a **sole source** contract as the contractor RTH Mechanical Contractors, Inc., is currently mobilized at NH Hospital and completing work on a DAS-DPW project named "Air Handling System Upgrades". This situation puts them in the best position to address the proposed infection control work quickly and cost-effectively. Their contract was approved by Governor and Council on August 28, 2019, Item No. 130.

Respectfully submitted,

 Asst. Comm.
for Charles M. Arlinghaus
Commissioner

I hereby approve this request pursuant to RSA 21-P:43, RSA 4:45, RSA 4:47 and Executive Order 2020-04 as extended by Executive Orders 2020-05, 2020-08, 2020-09, 2020-10, 2020-14, 2020-15, 2020-16, 2020-17, 2020-18, 2020-20, 2020-21, 2020-23, 2020-24, 2020-25, 2021-01, 2021-02, 2021-09 and 2021-05 and suspend the Manual of Procedures 150, V., A., 3 requirement.

Date

3-31-21

Governor Christopher T. Sununu



AMENDMENT TO 80970-CONTRACT D

This AMENDMENT TO THE CONTRACT ("Amendment") is entered into this 16th day of March, 2021, by and between the State of New Hampshire, acting by and through the Commissioner, Department of Administrative Services (hereinafter "State," "Commissioner," "Department" respectively) and RTH Mechanical Contractors, Inc. (hereinafter "Contractor") (the State and the Contractor may hereinafter singularly and/or collectively be referred to as "Party" or "Parties").

WHEREAS, in February 2019, the State received competitive bids on Project 80970, Contract C ("Project 80970-C"), which called for air handling system upgrades at New Hampshire Hospital. The bid was cancelled after all bids received by the Department significantly exceeded the available project budget.

WHEREAS, to reduce project costs, the Department removed duct cleaning and duct insulation replacement from the scope of work for Project 80970-C and competitively re-bid the project as Project 80970, Contract D ("Project 80970-D").

WHEREAS, on May 15, 2019, the Department received bids for Project 80970-D. The Contractor was selected as the lowest bidder. On August 28, 2019, pursuant to the approval of the New Hampshire Governor and Council, the Parties entered into a contract for the Rebid of Air Handling System Upgrades at New Hampshire Hospital, Project 80970, Contract D ("Contract").

WHEREAS, on or about July 14, 2020, the Department of Health and Human Services ("DHHS"), the Using Agency, received Coronavirus Aid, Relief, and Economic Security (CARES) Act Provider Relief funds, which are stimulus funds to cover the costs to prevent, prepare for, and respond to coronavirus. These funds may be used for healthcare facility upgrades to meet new infection control standards.

WHEREAS, in light of newly available federal funds, DHHS desires to make additional improvements at New Hampshire Hospital, including but not limited to the duct cleaning and duct insulation replacement work called for in Project 80970-C.

WHEREAS, the Contractor is currently mobilized at New Hampshire Hospital completing work under the Contract.

WHEREAS, the Parties desire for these additional improvements to be completed by the Contractor.

NOW THEREFORE, the Parties mutually agree to amend Contract as follows:

1. The scope of Work under the Contract shall be increased to include the "Facility Improvements" as set forth herein. These Facility Improvements include:

- a. Ductwork cleaning and duct insulation replacement in all locations detailed in the 80970-C Documents and the Inpatient Stabilization Unit (ISU) Area. The scope of this work is set forth in the 80970-C Documents.
 - i. The work required under Section 1(a) does not include any access panels in ceilings, independent hygienist or independent testing. This work will be performed by the State, through a qualified third party.
 - b. HVAC Testing, adjusting, and balancing. The scope and cost of this work is generally described in the Airadigm Solutions proposal dated January 28, 2021 attached hereto as **Exhibit A**.
 - c. Air Handler Unit (AHU) Equipment Modifications, which includes the materials and labor for the installation of germicidal UV lights in five (5) rooftop AHUs. The scope and cost of this work is generally described in the American Ultraviolet Company proposed dated January 27, 2021, the Barrett Electric Co, Inc. proposal dated February 2, 2021, Filter Sales & Service, Inc. Proposal dated January 28, 2021, and the spreadsheet dated February 2, 2021, collectively attached hereto as **Exhibit B**.
2. The State has retained Dubois & King, Inc. as a design consultant to prepare plans and specifications relating to the Facility Improvements ("Design Documents"). The Parties acknowledge that these Design Documents are not complete as of the date of this Amendment. Upon completion, the State shall promptly provide the Contractor with the Design Documents. The Facility Improvements shall be completed in accordance with these Design Documents.
 3. The Contractor agrees to receive, and the State agrees to pay, as full compensation for the Facility Improvements, the prices set forth by the Contractor in the cost spreadsheet dated February 2, 2021 attached hereto as **Exhibit C**, totaling the sum of one million two hundred ninety-six thousand five hundred thirty-three dollars and thirty-four cents (\$1,296,533.34).
 4. The following documents shall be considered Specifications:
 - a. 80970-C Section 23 0130, HVAC Air-Distribution System Cleaning dated January 17, 2019 ("Section 23 0130").
 - b. 80970-C Section 23 0713, Duct Insulation dated January 17, 2019 ("Section 23 0713").
 - c. Future specifications included in Design Documents prepared by Dubois & King, Inc.
 5. The following documents shall be considered Drawings:
 - a. Sheets 6 through 35 of 70 of Dubois & King Drawings for NH Hospital Air Handling System Upgrades, Project 80970 Contract C, Ductwork Cleaning & Insulation Project Phasing Requirements dated January 17, 2019 (collectively "D&K Drawings").
 - b. Future drawings included in Design Documents prepared by Dubois & King, Inc.

6. The D&K Drawings, Section 23 0130, and Section 23 0713 shall be collectively referred to as "80970-C Documents." The 80970-C Documents are attached hereto as **Exhibit D** and incorporated by reference.
7. The Contractor agrees to perform the Facility Improvements in accordance with all terms of this Amendment and the Contract, including any Specifications and Drawings under this Amendment or the Contract.
8. The Contractor covenants and agrees that the materials shall be furnished and delivered and all labor under this Amendment shall be performed in every respect to the satisfaction and approval of the Commissioner on or before: June 30, 2021.
9. This Amendment and the Specifications and Drawings attached hereto shall constitute Contract Documents as defined in Part 1 of Document 00708 to the Contract.
10. The Parties agree that this Amendment supersedes and replaces Change Order # 25 dated February 2, 2021.
11. This Amendment is subject to the continuing availability of federal funds and is governed by Section 19.2 of Document 00708 to the Contract.
12. Except to the extent specifically set forth herein, this Amendment does not alter the terms of the Contract. All terms of the Contract remain in full force and effect.
13. Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to them in the Contract.
14. This Amendment and all obligations of the Parties are contingent upon appropriate State approval.

IN WITNESS WHEREOF, the Parties hereto have set their hands the date first-written above.

CONTRACTOR:
RTH Mechanical Contractors, Inc.

By: 
Name: Richard T. Hansell
Title: President & Secretary

Date: 3-15-21

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES

By: Charlie M. Arlinghaus Date: Mar. 16, 2021
Name: Charlie M. Arlinghaus
Title: Commissioner

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES (Using Agency)

By: Lori Weaver Date: 3.16.21
Name: Lori Weaver
Title: Deputy Commissioner

The foregoing Amendment, having been reviewed by this office, is approved as to form and execution on March 29, 2021.

OFFICE OF THE ATTORNEY GENERAL

By: Christina M. White
Assistant Attorney General



2015 National Subcontractor of the Year

RTH Mechanical Contractors Inc

17 Production Drive
Dover, NH 03820-5917

Phone: 603-772-9779
Fax: 603-772-0389

Corporate Resolution

I, Richard T. Hansell, hereby certify that I am duly the President and Secretary of **RTH Mechanical Contractors Inc.**


I hereby certify the following is a true copy of a vote taken at a meeting of the Board of Directors, duly called and held on March 15, 2021 at which quorum of the Board was present and voting.

VOTED: That Richard T Hansell, on behalf of **RTH Mechanical Contractors Inc.**, enter into a specific contract amendment, for duct cleaning, insulation, test and balancing and UVC lighting related to the Re-Bid NH Hospital Air Handling Systems Upgrades, Project 80970-D, with the State of New Hampshire and further authorize said officer to execute any document which may in their judgement be desirable or necessary to affect the purpose of this vote.

I hereby certify that said vote has not been amended or repealed and remains in full force and effect as of March 15, 2021, and that Richard T. Hansell is the duly elected President and Secretary, respectively, of this business.

Attest:

Date: March 15, 2021



Richard T. Hansell, President & Secretary
RTH Mechanical Contractors Inc

State of New Hampshire

Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that RTH MECHANICAL CONTRACTORS, INC. is a New Hampshire Profit Corporation registered to transact business in New Hampshire on May 19, 2008. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **596733**

Certificate Number: **0005252989**



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 9th day of February A.D. 2021.

A handwritten signature in cursive script, appearing to read "Wm Gardner".

William M. Gardner
Secretary of State



RTHMECH-01

NMARBLE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/15/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 1780862 HUB International New England 275 US Route 1 Cumberland Foreside, ME 04110	CONTACT NAME:	
	PHONE (A/C, No, Ext): (207) 829-3450	FAX (A/C, No): (207) 829-6350
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Hanover Insurance Company	22292
INSURED RTH Mechanical Contractors Inc. RTH Mechanical Contractors, State of NH, Dept of Administrative Servi 17 Production Drive Dover NH 03820	INSURER B: Hanover American Insurance	36064
	INSURER C: MEMIC Indemnity Company	11030
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT 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. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:	X	ZBPH511290	2/20/2021	2/20/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 HNOA \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	X	AWPH511319	2/20/2021	2/20/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0	X	UHPH511291	2/20/2021	2/20/2022	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 Prod. & Comp Op \$ 10,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	5101800156	2/20/2021	2/20/2022	<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Bldrs Risk All Risk		IHPH497723	2/3/2021	2/3/2022	Limit Ded \$2500 3,578,854
B	OCP		LPH510829	2/3/2021	6/3/2021	2,000,000 per occ. 3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Job #19-936

Project Re-Bld NH Hospital Air Handling Systems Upgrades, Project No. 80970D in Concord, NH.

The State of New Hampshire, its agencies, its agents, and employees are hereby listed as an additional insured on the General Liability, Automobile & Umbrella policy per the terms and conditions of their written contract. The OCP policy is for the benefit of the State of New Hampshire Department of Administrative Services. The Builders Risk policy is in the name of RTH Mechanical Contractors, Inc. & State of NH, Dept. Of Administrative Services, any and all subs and all tier subs.

CERTIFICATE HOLDER

CANCELLATION

State of New Hampshire
C/O Department of Administrative Services
7 Hazen Drive, Room 250
Concord, NH 03302

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Exhibit A

AIRADIGM[®] SOLUTIONS

Testing, Adjusting and Balancing Proposal

Job Name
NH Hospital AHU Upgrades

Job Location
36 Clinton Street
Concord, New Hampshire 03302, United States

Company Name
RTH Mechanical Contractors Inc

Proposal Issue Date
01/28/21

Proposal Number & Version
1,615x162.1

Prepared By
Danielle Vardonok (Estimator)

This proposal offers TAB (testing, adjusting and balancing) services which encompass the following scope of work and includes a written report upon completion of all work on our standard forms

Air Equipment	Qty	Water Equipment	Qty
Large Air Handling Uni/ERV (Return & Supply)	6	Cooling Tower	0
AHUs, RTUs, and MUAs	0	Chillers	0
Supply and Exhaust Fans - General	70	Boilers Furnace	0
FCU / Heat Pump with Ducted OA	0	Pumps	0
FCU / Heat Pump no OA	0	Unit and Cabinet Heaters	0
Split system A.C. unit	0	Domestic Hot Water Coils	0
Variable Air Volume - terminal units	348	Fin Tubes and Radiant Manifolds	0
Variable Air Volume - fan powered units	0	Reheat Coils	0
Fan Filter Units	0	Chilled Coils	0
Fume hoods or Grease Hoods	4	Other Coils	0
Ducted CUHs, Small ERVS, AC Cassettes	0		
Small Standalone Fans or Readings	0		
Registers, Grills, and Diffusers	1278		

Scope Of Work

Duct Leakage Testing - DALT
Sheaves and Belts - provided and installed
Prevailing and Wages - State or Bacon Davis
Pre-Balancing Readings
Sound Testing
Vibration Testing
Season 1 and Season 2 separate TAB
Regular business hours
Night Work

By Owner
By General Contractor
By General Commissioning Agent
By Mechanical Contractor
Not in specs and not included
specs but not included
By Airadigm Solutions

Additional Notes:

Night Work Add for Pre Balance Readings Add = \$4,760
Night Work for Post Balancing Add = \$12,250

Addendums:

Drawing & Specs Dated
1/17/2019

Prepared By
Danielle Verdonck (Estimator)

Proposal Date
1/28/2021

Payment Terms
Net 30, credit card payments subject to 3.5% fee

TOTAL \$124,900.00

We propose hereby to furnish labor complete
in accordance with Airadigm Solutions
specification for the total sum

Company Name: RTH Mechanical Contractors Inc

Signature:

Street: 17 Production Drive

City: Dover

State and Zip: New Hampshire, 03820

PO Number:

Date Signed:

Printed Name:

Exhibit B

February 2, 2021

Barrett Electric Co., Inc.
PO Box 2338
Concord, NH 03302-2338

RTH Mechanical Contractors
Dover, NH

RE: NHH Rebid- UV Installation in (5) Roof top AHU's

Dear Bryan:

I am pleased to present my quotation for the electrical portion of the work associated with the above referenced project.

Scope:

1. Furnish and install electrical work in accordance with our interpretation of the following documents and specifications and our design.
Drawings and specifications as transmitted to Barrett Electric.
2. All work is to be as shown on the above referenced plans, drawings and specifications and as qualified above. Requirements and/or desires of the owners, architects, or inspecting authorities that vary from the plans or specifications will be performed at additional costs.

Pricing:

Our price for the above scope of work is Four Thousand dollars (\$25,000.00).

Thank you for the opportunity to quote this project. Please call with any questions. I look forward to working with you on this project and others in the future.

Sincerely,

Chris Barrett
Barrett Electric Co., Inc.

Electrical Controls Specialists



AMERICAN ULTRAVIOLET COMPANY

January 27, 2021

RTH Mechanical Contractors
17 Production Dr
Dover, NH 03820
Bryan,

QUOTE NHH1282021

Thank you for your request for a quotation on the New Hampshire Hospital air-handlers. The sizing is based on the information supplied. Please find below the quotation for your review. The pricing does not include the conduit for mounting the lamps this can be sourced locally to save on cost.

AHU-1 air and coil disinfection - coil is 126" high x 120" wide

Qty	Model #	Description
(1)	CK-8	CK series electrical enclosure 8 ballast
(8)	GSL60	60" germicidal lamps
(16)	LHD165	Lamp clips
(8)	2567-05	30' lamp cables w/ Sure-seal connector
(2)	SWT105	Door limit switch
(2)	LBL150	"UV in use" warning sign

Total \$2,770.00

Options:

(2)	ACB-031	4 lamp BMS boards	\$882.00 ea.
(1)	SWT105	Additional door limit switch	\$60.00 ea.
(1)	UVTRAD	Relative Intensity monitor	\$595.00 ea.
(1)	N4X	Adder per enclosure for outdoor rated enclosures	\$420.00 ea.

AHU-2 air and coil disinfection - coil is 90" high x 90" wide

Qty	Model #	Description
(1)	CK-6	CK series electrical enclosure 6 ballast
(6)	GSL48	48" germicidal lamps
(12)	LHD165	Lamp clips
(6)	2567-05	30' lamp cables w/ Sure-seal connector
(2)	SWT105	Door limit switch
(2)	LBL150	"UV in use" warning sign

Sub-total \$2,140.00

Options:

(1)	ACB-030	2 lamp BMS board	\$295.00
(1)	ACB-031	4 lamp BMS board	\$440.00
(1)	SWT105	Additional door limit switch	\$60.00 ea.
(1)	UVTRAD	Relative intensity monitor	\$595.00 ea.
(1)	N4X	Adder per enclosure for outdoor rated enclosures	\$420.00 ea.



AMERICAN ULTRAVIOLET COMPANY

January 27, 2021

AHU-28 air and coil disinfection - coil is 75" high x 84" wide

Qty	Model #	Description	
(1)	CK-6	CK series electrical enclosure 6 ballast	
(3)	GSL24	24" germicidal lamps	
(3)	GSL60	60" germicidal lamps	
(12)	LHD165	Lamp clips	
(6)	2567-05	30' lamp cables w/ Sure-seal connector	
(2)	SWT105	Door limit switch	
(2)	LBL150	"UV in use" warning sign	
(1)	PEK-60	Packaged equipment unit 60" kit*	
			Sub-total \$2,395.00

Options:

(1)	ACB-030	2 lamp BMS board	\$295.00
(1)	ACB-031	4 lamp BMS board	\$440.00
(1)	SWT105	Additional door limit switch	\$60.00 ea.
(1)	UVTRAD	Relative intensity monitor	\$595.00 ea.
(1)	N4X	Adder per enclosure for outdoor rated enclosures	\$420.00 ea.

* PEK-60 unit to be installed on the downstream side of the coil to flood the chamber. CK system to be installed upstream of coil.

AHU-3 air and coil disinfection - coil is 126" high x 120" wide

Qty	Model #	Description	
(1)	CK-8	CK series electrical enclosure 8 ballast	
(8)	GSL60	60" germicidal lamps	
(16)	LHD165	Lamp clips	
(8)	2567-05	30' lamp cables w/ Sure-seal connector	
(2)	SWT105	Door limit switch	
(2)	LBL150	"UV in use" warning sign	
			Total \$2,770.00

Options:

(2)	ACB-031	4 lamp BMS boards	
(1)	SWT105	Additional door limit switch	\$60.00 ea.
(1)	UVTRAD	Relative intensity monitor	\$595.00 ea.
(1)	N4X	Adder per enclosure for outdoor rated enclosures	\$420.00 ea.



AMERICAN ULTRAVIOLET COMPANY

January 27, 2021

AHU-4 air and coil disinfection - coil is 126" High x 120" wide

Qty	Model #	Description
(1)	CK-8	CK series electrical enclosure 8 ballast
(8)	GSL60	60" germicidal lamps
(16)	LHD165	Lamp clips
(8)	2567-05	30' lamp cables w/ Sure-seal connector
(2)	SWT105	Door limit switch
(2)	LBL150	"UV in use" warning sign

Total \$2,770.00

Options:

(2)	ACB-031	4 lamp BMS boards	
(1)	SWT105	Additional door limit switch	\$60.00 ea.
(1)	UVTRAD	Relative intensity monitor	\$595.00 ea.
(1)	N4X	Adder per enclosure for outdoor rated enclosures	\$420.00 ea.

Project total \$

Thank you so much for your interest and please feel free to contact us with any questions and let us know how we can help. We added OPTIONS section for each unit. When placing the order we can remove any items that are not required.

This quotation is valid for thirty days from the date above. Approximate lead-time is 8-10 weeks from receipt of purchase order and deposit.

All shipments are freight collect Lebanon, IN 46052

Please take a few minutes to review the quotation and feel free to call us with any questions.

Thank you for considering Filter Sales and American Ultraviolet Company.

Kind regards,

Bill Lonstein

Filter Sales & Service

blonstein@filtersales.com

617-293-9430

If there are technical questions, we can contact Sam by email or conference call.

Sam Guzman

American Ultraviolet Company email: SGuzman@auvco.com

QUOTATION

Filter Sales & Service, Inc.
15 Adams St
Burlington, MA 01803
781-272-0060



Order Number	
11096351	
Order Date	Page
1/28/2021 14:10:21	1 of 1

Quote Expires On 3/29/2021

Bill To: 12244
Rth Mechanical Services
17 Production Drive
Accounts Payable
Dover, NH 03820
US
(603) 772-9779

Ship To: 12244
Rth Mechanical Services
17 Production Drive
Dover, NH 03820
US

Requested By: Sue Maciejowski

Sales Rep: Bill Lonstein

Order Source:

PO Number					Ship Route		Carrier		Taker		
							Our Truck		BLONSTEIN		
Quantities					Item ID		Pricing	Unit		Extended	
Ordered	Allocated	Remaining	UOM	Unit Size	Item Description	UOM	Unit Size	Price	Price		
54.00	0.00	54.00	EA	1.0	AUV-GSL-60	EA		119.00	6,426.00		
					60 CK Series Lamp		1.0				
12.00	0.00	12.00	EA	1.0	AUV-GSL-48	EA		105.00	1,260.00		
					48 CK Series Lamp		1.0				
6.00	0.00	6.00	EA	1.0	AUV-GSL-24	EA		80.50	483.00		
					24 CK Series Lamp		1.0				

Total Lines: 3

SUB-TOTAL: 8,169.00

TAX: 0.00

AMOUNT DUE: 8,169.00

U.S. Dollars

- Please note that credit card payments are accepted at the time of order placement. Credit cards used for payment after order delivery are subject to 2.5% processing fee.

- Custom sized filters are not eligible for return. Please ensure you are ordering the correct size when ordering custom filters.

-Orders placed for pick up must be picked up within two weeks of first notification.

-All delivery orders are FOB factory or Filter Sales & Service warehouse unless otherwise noted.

State of NH 80970D Takeoff - Duct Cable Totals

QTY.	DESCRIPTION	MATERIAL	EQUIP	SUBS	VENDOR	PHASE
	ABU-1					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-2					
	Base		2,140.00			
	bms		735.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-2B					
	Base		2,395.00			
	bms		735.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-3					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-4					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-4					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
		0.00	22,336.00	0.00		

Exhibit C

State of NH 80970D Takeoff - Duct Cleaning Cleaning

QTY.	DESCRIPTION	HRS	Labor Cost	MATERIAL	SUBS	Bond	Final Cost.
	FIXES & PERMITS	0	\$ -	\$ -			
	GARANTEE	24	\$ 2,136.00	\$ 500.00			
	RECORD DRAWINGS	15	\$ 1,600.00	\$ 250.00			
	Scheduling	40	\$ 4,000.00				
	Weekly Meetings - 16-weeks	32	\$ 3,200.00				
	Weekly Office Visit	32	\$ 3,200.00				
	Mobilization	8	\$ 712.00	\$ 50.00			
4	LABOR POSTERS - WEATHER PROOF	2	\$ 178.00	\$ 600.00			
2	Temporary wall isolation Systems	4	\$ 356.00	\$ 19,549.00			
20	Setup and breakdown	320	\$ 28,480.00				
40	CONTRACTOR BADGES - PHOTO ID ALL PE	4	\$ 356.00	\$ 1,000.00			
	MASTER LIST - DAILY	16	\$ 1,424.00	\$ 25.00			
	Duct Cleaning	DOCT	>>>>>>>>	>>>>>>>>	\$ 356,590.00		
	Access Panels	DOCT	>>>>>>>>	>>>>>>>>	\$ 56,136.00		
	Supervision - Day	320	\$ 28,480.00				
	Supervision - Off Hours	320	\$ 42,720.00				
	UVC Systems	4	\$ 356.00	\$ 22,336.00			
2	Spare Bulbs - 2-sets	4	\$ 356.00	\$ 8,169.00			
	Freight	>>>>>	>>>>>>>>	\$ 1,000.00			
5	Installation	80	\$ 10,680.00				
6	Access Door Window - Furnish & Ins	SM	>>>>>>>>	\$ 5,400.00			
	AHU-2B - Blower Fan Guard	SM	>>>>>>>>	\$ 1,500.00			
	UV protective coating in AHU's.	16	\$ 2,136.00				
	Electrical Wiring	Elec	>>>>>>>>	>>>>>>>>	\$ 25,000.00		
	Permits	2	\$ 178.00	\$ 750.00			
	Balancing	BAL	>>>>>>>>	>>>>>>>>	\$ 141,900.00		
	Insulation	INS	>>>>>>>>	>>>>>>>>	\$ 190,952.00		
	Demo existing Insulation	INS	>>>>>>>>	>>>>>>>>	\$ 36,582.00		
	Dumpster	4	\$ 356.00	\$ 1,687.00			
	Supervision - Day	160	\$ 14,240.00				
	Supervision - Off Hours	160	\$ 21,360.00				
	CONTRACTOR WORK - Ceiling Work	C/C	>>>>>>>>	\$ 5,000.00			
	De-Mobilization	8	\$ 712.00	\$ 50.00			
	FINAL CLEANUP	16	\$ 1,424.00	\$ 250.00			
	Sub-Totals		\$ 168,640.00	\$ 68,056.00	\$ 809,160.00		
	Mark-Up		\$ 33,728.00	\$ 6,809.60	\$ 80,916.00		
	Allowance					\$ 100,000.00	
	Bond/Oct/Builddrs Risk					\$ 29,183.74	
		1592	\$ 202,368.00	\$ 74,905.60	\$ 890,076.00	\$ 129,183.74	\$ 1,296,533.34

State of NH 80970D Takeoff - Duct Classification

QTY.	DESCRIPTION	MATERIAL	EQUIP	SUBS	VENDOR	PHASE
	ABU-1					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-2					
	Base		2,140.00			
	bms		735.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-2B					
	Base		2,395.00			
	bms		735.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-3					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-4					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
	ABU-4					
	Base		2,770.00			
	bms		882.00			
	door switch		60.00			
	Moniotr		595.00			
	N4X encloser		420.00			
		0.00	22,336.00	0.00		

Amendment to 80970 – Contract D

Exhibit D

SECTION 23 0130**HVAC AIR-DISTRIBUTION SYSTEM CLEANING****PART 1 - GENERAL****1.1 SUMMARY**

Facility-wide cleaning of air handling unit supply and return air ductwork, registers, grilles, and diffusers, and general exhaust ductwork. Scope of work includes the cleaning of air-handling units, ductwork and diffusers; furnish and installation of access doors and panels; removal and replacement of ceiling systems; and coordination with the Using Agency (Owner) for scheduling and access.

A. Section includes:

1. Cleaning of air handling units and HVAC ductwork associated with Air Handling Units AHU-1, AHU-2, AHU-2B, AHU-3, AHU-4, and AHU-5.
2. Cleaning of general exhaust ductwork systems.

B. Related Requirements

1. See Division 01.
2. See Plan view drawings for additional descriptions.

1.2 REFERENCES**A. Abbreviations and Acronyms: See *Assessment, Cleaning, and Restoration of HVAC Systems* (hereafter, ACR), The NADCA Standard (Current Version).****B. Reference Standards:**

1. Following current standards and publications of issues currently in effect form part of this specification to extent specified:
 - a. American National Standards Institute/Institute of Inspection Cleaning and Restoration Certification (ANSI/ICRC).
 - 1) ANSI/ICRC S520 - Standard for Professional Mold Remediation.
 - b. National Air Duct Cleaners Association (NADCA):
 - 1) ACR: *The NADCA Standard - Assessment, Cleaning & Restoration of HVAC Systems* (Current Version).
 - c. National Fire Protection Association (NFPA):
 - 1) NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems.
 - 2) NFPA 90B - Standard for the Installation of Warm Air Heating and Air-Conditioning Systems.
 - d. North American Insulation Manufacturers Association (NAIMA):
 - 1) Cleaning Fibrous Glass Insulated Air Duct Systems.
 - e. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA):
 - 1) HVAC Duct Construction Standards - Metal and Flexible.
 - f. Underwriters' Laboratories (UL):
 - 1) UL Standard 181 - UL Standard for Safety Factory-Made Air Ducts and Connectors.
 - 2) UL Standard 181A - UL Standard for Safety Closure Systems for Use with Rigid Air Ducts.
 - g. US Green Building Council (USGBC)

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Refer to Division 01 and contract drawings.
- B. Kick-Off Pre-Cleaning Meeting:
 - 1. Contractor, in cooperation with the Contract Administrator, shall conduct a kick-off pre-cleaning meeting with representatives of the Using Agency and facility occupants affected by cleaning work.
 - 2. Coordinate meeting date with Contract Administrator a minimum of 14 days in advance.
- C. Scheduling: As directed by the Contract Administrator. Contractor shall provide within 14 days after the Kick-Off Meeting the Cleaning Schedule showing work in each area for review and acceptance by the Using Agency. Work shall not commence until the Schedule has been submitted, accepted, and returned to the Contractor.

1.4 SUBMITTALS

- A. See Division 01 for submittal and substitution procedures.
- B. Informational Submittals:
 - 1. Ductwork materials and supplies.
 - 2. Duct cleaning plan: Before commencing cleaning work, submit written work plan including following information:
 - a. Scope of Work identifying HVAC components are to be cleaned, as well as those components not to be cleaned.
 - b. Itemize specific environmental engineering controls required for workspace, and special work requirements.
 - c. Detail cleaning work means and methods.
 - d. Name, contact information, and functional tasks performed by each representative of each firm and contractor involved with the work.
 - 3. Manufacturer's Instructions: Submit cleaning agent product installation instructions.
 - 4. Field Quality Control Submittals:
 - a. Submit laboratory analysis results, if NADCA Vacuum Test is used for cleanliness verification.
 - b. Submit documentation detailing chain of custody for test samples, if outside laboratories or testing agencies performed sample analysis or testing.
 - 5. Qualification Statements: Provide documents showing membership status, project experience, and certifications for:
 - a. HVAC Cleaning Contractor.
 - b. Supervisor.
 - c. Inspector.
 - d. Hygienist.
 - e. Testing Agency.
- C. Closeout Submittals:
 - 1. Record Documentation: Submit documentation verifying compliance with this specification for work performed. This documentation may include:
 - a. Provide record Drawings showing areas of completed cleaning work, as verified by Using Agency's visual review and confirmation of work completed.

- b. Photo images, Reports, and other supporting documents such as submittal forms for materials used and/or warranties or guarantees.
 - c. System areas found to be damaged requiring repair.
 - D. Quality Assurance:
 - 1. Regulatory Agency Sustainability Approvals.
 - 2. Qualifications.
 - a. Manufacturers.
 - b. Suppliers.
 - c. Fabricators.
 - d. Installers/Applicators/Erectors.
 - e. Testing Agencies.
 - f. Licensed Professionals.
- 1.5 QUALIFICATIONS
 - A. HVAC System Cleaning Contractor: The Contractor shall be a current member in good standing of NADCA and shall be trained and experienced in HVAC cleaning projects of similar size and complexity. No exceptions.
 - 1. Supervisor: Employ NADCA-certified Air Systems Cleaning Specialist (ASCS) responsible for project.
 - 2. Inspector: Employ NADCA-Certified ASCS, or NADCA-Certified Ventilation Inspector (CVI) to perform site inspections.
 - B. Licensing:
 - 1. Submit copy of proper licenses, required to legally perform work, in New Hampshire.
 - 2. Comply with applicable federal, state, provincial, and local, rules, regulations, and licensing requirements.
 - 3. Comply with requirements of Authorities Having Jurisdiction.

PART 2 - PRODUCTS

2.1 DUCTWORK MATERIALS

- A. Access Doors
 - 1. Sandwich-style access door with closed cell neoprene gaskets, threaded bolts with springs and polypropylene hand knobs.
 - a. Ductmate Industries DI—MGA series insulated access doors for double-wall ductwork (or accepted equal).
 - b. Ductmate Industries DU—MGA series uninsulated access doors for single-wall ductwork (or accepted equal).
 - 2. Door Labeling: See section 3.4 (below) for labeling requirements.

2.2 CLEANING MATERIALS

- A. Cleaning Agents: Provide Submittals and MSDS. Contractor shall submit sample and documents of agents for review by the Using Agency's Certified Industrial Hygienist (CIH) and/or Infection Control Department. Agents not accepted shall be replaced with agents in compliance with Agency's standards at no additional cost.

- B. Water: Potable.

2.3 TREATMENT MATERIALS

- A. Antimicrobial Agents: Contractor shall submit sample and documents of agents for review by the Using Agency's Certified Industrial Hygienist (CIH) and/or Infection Control Department. Agents

not accepted shall be replaced with agents in compliance with Agency's standards at no additional cost.

- B. Sealants: Provide Submittals and MSDS. Contractor shall submit sample and documents of sealants for review by the Using Agency's Certified Industrial Hygienist (CIH) and/or Infection Control Department. Sealants not accepted shall be replaced with agents in compliance with Agency's standards at no additional cost.

2.4 DUCT LINER MATERIALS

- A. Duct Liner: Fibrous glass insulation – Matching existing.
 - 1. Where replacing internal insulation, furnish materials conforming to UL, NFPA 90A, NFPA 90B and SMACNA standards.
 - 2. Match thickness and insulation thermal resistance of existing duct liner.

PART 3 - EXECUTION

3.1 HVAC DUCT CLEANING CONTRACTORS

- A. NADCA Member Contractor – No Exception.

3.2 EXAMINATION

- A. HVAC System Assessment and Site Survey:
 - 1. Before commencing work, assess HVAC system condition to determine appropriate engineering controls, safety measures, tools, equipment and cleaning products and methods required to complete the work.
 - 2. Perform HVAC system assessment by ASCS, Certified Ventilation Inspector (CVI), or equivalent.
 - 3. If microbial testing or sampling are required, provide services of technicians trained and acceptable to the Contract Administrator.
- B. Work Plans:
 - 1. Project Schedule: Outline starting date, dates and times when work will take place, and completion date.
 - 2. Product Data and Safety Data Sheets: Product data submittals listing general use and specific chemical cleaning products and coatings used while performing the work, along with Safety Data Sheets for chemical products used to perform the work.
 - 3. Safety Plan: In cooperation with the Contract Administrator and the Using Agency representatives, define responsibilities of each organization's designated representative involved with executing work plan throughout project.

3.3 PROTECTION OF IN-PLACE CONDITIONS

- A. Protect existing structures, surfaces, and systems from damage resulting from duct cleaning work.
- B. Report damage caused by this work to the Contract Administrator. Damage shall be repaired to the acceptance of the Contract Administrator at no additional cost.

3.4 HVAC SYSTEM PREPARATION

A. Service Openings:

1. Access duct cleaning work through existing or new service openings (access doors or panels), allowing safe access and thorough cleaning throughout specified components.
2. Work through service openings sized to allow mechanical tool entry and visual inspection, as required for cleaning activities.
3. Where possible, work through existing service openings.
4. Where new service openings are required, install openings as follows:
 - a. Do not degrade structural, thermal, or functional system integrity, and comply with applicable SMACNA duct construction methods.
 - b. Install service openings complying with UL and NFPA standards, federal, state, and local code requirements, and requirements of Authorities Having Jurisdiction.
 - c. Where required, install duct access doors complying with UL Standard 181, and fabricated with materials classified for flammability and smoke developed. Refer to Drawings for manufacturer and specification for access doors.
 - d. Insulate closure panels to match adjacent duct interior and exterior surfaces.
 - e. Close service openings installed in metal ductwork with fibrous glass liner with no exposed fibrous glass edges exposed to airstream.
5. Install service openings / access doors that are in accessible locations and can be reopened for future work.
6. Labeling: Label service openings / access doors with machine-made vinyl label. Letters shall be a minimum of 1" high indicating "Cleaning Access Door".
7. Record locations of service openings / access doors on record drawings.
8. Do not cut service openings into flexible duct.
 - a. Disconnect flexible duct at both ends as required for inspection and cleaning.
 - b. Reconnect flexible duct ends in accordance with SMACNA standards.

3.5 CLEANING EQUIPMENT MAINTENANCE AND USE

- A. Maintain equipment employed in work performance in good working order, consistent with equipment manufacturer's written instructions and applicable jurisdictional requirements.
- B. Clean and inspect equipment before bringing to work site.
- C. Do not introduce contaminants from cleaning equipment into indoor environment or HVAC system.
- D. Service equipment to limit possible HVAC system contamination from insufficient service equipment cleaning, and unsafe operating conditions for service personnel and building occupants.
- E. Perform activities requiring opening contaminated vacuum collection equipment on-site, including servicing or filter maintenance, in appropriate containment area or outside building as directed by the Contract Administrator or Using Agency.

- F. Clean and seal collection devices, vacuums and other tools and devices before relocating to different building areas, moving equipment through occupied spaces, and before removing equipment from building.
- G. Locate fuel-powered equipment to prevent combustion emissions and air exhaust emissions from entering building envelope. Monitor and manage equipment operation and location to prevent introduction of combustion emissions into occupied space. Locate in appropriate containment area or outside building as directed by the Contract Administrator or Using Agency
- H. Furnish HEPA-filtered equipment with minimum collection efficiency of 99.97 percent at 0.3 micron particle size, when vacuum collection equipment exhausts within building envelope.

3.6 CLEANING - GENERAL

- A. Perform HVAC system cleaning in accordance with ACR, The NADCA Standard.
- B. Remove visible non-adhered particulates.
 - 1. Clean HVAC components employing agitation device to dislodge contaminants from HVAC component surface, and then capturing contaminants with vacuum collection device.
 - a. Acceptable methods include those that do not damage integrity of ductwork and other system components, and does not damage porous surface materials including internal insulation and duct lining.
 - 2. Clean HVAC components using source removal mechanical cleaning methods designed to extract contaminants from within HVAC system and safely remove contaminants from facility.
 - 3. Select source removal methods rendering HVAC system visibly clean and capable of passing cleanliness verification methods as described in ACR, The NADCA Standard.
 - 4. Do not employ cleaning method, or combination of methods, that can damage HVAC system components or negatively alter system integrity.
 - 5. Do not damage HVAC system and components with wet cleaning, power washing, steam cleaning and other wet process cleaning.
- C. Apply cleaning materials in accordance with manufacturer's instructions.
 - 1. Do not apply cleaning agents or water to electrical, fibrous glass or other porous HVAC system components.
- D. Capture removed contamination and cleaning materials and legally dispose.
- E. Verify HVAC system surface and component cleanliness in accordance NADCA Standard. Provide report to the Contract Administrator.
- F. Particulate Collection:
 - 1. Employ contaminant removal methods incorporating vacuum collection devices operated continuously during cleaning.
 - a. Connect vacuum collection device to component being cleaned through service opening.
 - b. Employ vacuum collection device of sufficient capacity to maintain areas being cleaned under negative pressure, containing debris is contained and preventing contaminant migration to adjacent areas.

2. When possible, discharge ducted exhaust air from vacuum collection devices outdoors, keeping discharge air clear of outdoor air intakes, operable windows, and other locations allowing outdoor air entry.
 - a. Do not violate outdoor environmental standards, codes or regulations.
 - b. Do not discharge unfiltered air from vacuum collection devices outdoors.
 - c. Maintain Infection Control Standards as directed by the Contract Administrator.
3. When necessary to exhaust vacuum collection devices indoors, including hand-held and wet-vacuum machines, keep discharge air in work area, and provide machine air discharge HEPA filtration, rated at 99.97 percent collection efficiency for 0.3 micron particles and larger.

3.7 AIR HANDLING UNIT (AHU) CLEANING

- A. Clean Air Handling Units – Refer to Drawings.
 1. Clean supply and return air blowers, fan housings, ducted plenums, scrolls, blades, or vanes, shafts, baffles, dampers and drive assemblies.
 2. Remove visible non-adhered particulate deposits in accordance with NADCA Standards.
 3. Clean return fans and housings.
 4. Do Not Clean Supply Blowers that are scheduled for Replacement (AHU-1 and AHU-2 only).
- B. Clean air handling unit (AHU) internal surfaces, components and condensate pans, and drains.
- C. Clean heat transfer coils, fans, condensate pans, drains and similar non-porous surfaces in conjunction with mechanical methods as described in ACR, The NADCA Standard.
- D. Control water spray and extraction are sufficient to collect debris and prevent water damage to HVAC components and surrounding equipment.
- E. Capture, contain, test and dispose of waste water generated while performing wet cleaning in accordance with applicable federal, state, and local regulations, and requirements of the Contract Administrator.
- F. After cleaning, verify HVAC system surface and component cleanliness in accordance ACR, The NADCA Standard.

3.8 AIR DUCT SYSTEMS:

- A. Clean air ducts to remove non-adhered substances.
- B. Access air duct interiors through service openings in system that are large enough to accommodate mechanical cleaning procedures and allow for cleanliness verification.
- C. Use mechanical agitation methods to remove particulate, debris, and non-adhered particulate.
- D. Capture dislodged substances with vacuum collection device.
- E. Do not employ cleaning methods that damage HVAC components.
- F. Mark position of dampers and air-directional mechanical devices inside HVAC system prior to cleaning.
- G. When cleaning is complete, restore dampers and devices to their marked positions.
- H. After cleaning, verify cleanliness of HVAC system surfaces and components in accordance ACR, The NADCA Standard.

3.9 AHU COILS

- A. Perform visual coil and drain pan inspection to determine whether Type 1 dry cleaning, or Type 2 wet cleaning is required.
- B. Employ cleaning methods rendering coil visibly clean in accordance with ACR, The NADCA Standard.
- C. For duct mounted coils: Provide new access doors on each side of the coil where doors do not exist or existing doors are of insufficient size or quantity.
- D. Isolate coil from duct system during cleaning process. Do not allow removed particles to migrate to, or redeposit on, unintended areas.
- E. Apply coil cleaning products in accordance with manufacturer's published data and labeling.
- F. Clean and flush condensate drain pan and drain line. Verify proper drainage operation before and after cleaning.
- G. Apply cleaning methods and products that do not cause damage to, or erosion of, coil surface or fins.
- H. **TYPE 1 DRY CLEANING METHOD**
 - 1. Operate HEPA-filtered negative air machines that discharge continuously during Type 1 cleaning process.
 - 2. Mechanically remove adhered dirt and contaminants in accordance with ACR, The NADCA Standard.
- I. **TYPE 2 WET CLEANING METHOD**
 - 1. Employ Type 2 wet cleaning method when visual inspection reveals suspect microbial matter on coil or drain pan. Access both upstream and downstream sides of each coil section for cleaning.
 - 2. Employ engineering controls required for coil cleaning in accordance with ACR, The NADCA Standard.
 - 3. Verify cleanliness after cleaning has been performed as described in ACR, The NADCA Standard.
 - 4. Perform Type 2 cleaning if debris still remains on the coil or the coil is impacted after Type 1 cleaning has been completed and post-cleaning inspection has been performed.
 - 5. After cleaning, verify cleanliness of HVAC coils in accordance ACR, The NADCA Standard.

3.10 INTERNALLY INSULATED DUCT SYSTEM COMPONENTS AND SOUND ATTENUATORS

- A. Employ cleaning methods that do not damage internal insulation or sound attenuating components, and that render system capable of passing cleanliness verification tests.
- B. Clean fibrous glass duct liner or duct board present in equipment or air ducts employing mechanical agitation methods to remove particulate, debris, and non-adhered particulate.
- C. Do not create abrasions, breaks, or tears to fibrous glass liner or duct board surfaces.
- D. Maintain HVAC system under constant negative pressure when cleaning internal insulation components.
- E. Do not wet insulation components.
- F. Identify for replacement fibrous glass materials with evidence of damage, deterioration, delaminating, friable materials, biological growth, or moisture that cannot be restored by cleaning or resurfacing.
- G. When required, remediate exposed, damaged insulation exposed to HVAC system air stream.

1. Scrape insulation and adhesive residue from metal duct system surfaces that have undergone degraded insulation removal.
2. Remove loose, visible debris prior to installation of new insulation.
3. Where biologically contaminated insulation was removed, apply antimicrobial agents to remove traces of contamination or abate mold in accordance with ANSI/IICRC S620.
4. When replacement insulation installation is complete, verify that new fibrous glass surfaces are capable of compliance with NADCA cleanliness verification requirements.

3.11 SPECIAL TECHNIQUES

A. Engineering Controls:

1. Employ engineering controls to maintain worker and building occupant safety, and prevent contaminating surfaces outside work area.
 - a. Comply with government regulations, and industry standards and guidelines relevant to working in the facility environment in which the work is located.
 - b. Control odors, mists, and aromatic vapors during cleaning process.

B. Controlling Product Emissions:

1. Apply cleaning agents and other chemicals in accordance with manufacturer's recommended procedures and product application instructions, including exhaust ventilation.

C. Negative Duct Pressurization:

1. Throughout cleaning process, keep HVAC system and associated air ducts at negative differential pressure, relative to indoor non-work area.
2. Maintain negative pressure differential between portion of HVAC duct system being cleaned and surrounding indoor occupant spaces.
3. Continuously monitor and verify correct pressure differential.
4. When performing vacuum collection, employ negative air machine drawing air from equipment being cleaned.
5. When negative air machine is not fitted with HEPA filtration, duct exhaust air from negative air machine to outdoor location, keeping discharge air clear of outdoor air intakes, operable windows, and other locations where outdoor air enters building.
 - a. Do not violate outdoor environmental standards, codes or regulations by releasing debris.
 - b. Do not discharge unfiltered air from vacuum collection devices outdoors.

D. Microbial Agents:

1. Apply antimicrobial agents only when active biological growth is reasonably suspected, or where unacceptable levels of biological contamination have been verified through testing.
2. Apply antimicrobial agents after removal of surface deposits and debris.
3. Apply antimicrobial agents in accordance with antimicrobial agent manufacturer's written recommendations and associated EPA registration listing.

3.12 FIELD QUALITY CONTROL

- A. Inspect work to verify cleanliness immediately after HVAC system component cleaning and prior to placing system in operation.
- B. Do not apply treatment, coating, or antimicrobial agent to cleaned HVAC system or components until the work has been inspected and determined to be acceptable.
- C. Visual Inspection:
 - 1. When cleaning is complete, perform final inspection in presence of Contract Administrator and/or Using Agency.
 - 2. Perform visual inspection of porous and non-porous HVAC system component surfaces. Verify HVAC system is visibly clean as defined in ACR, The NADCA Standard.
 - 3. If no contaminants are evident through visual inspection, HVAC is considered clean and acceptable.
 - 4. If contaminants are evident through visual inspection, repeat cleaning system areas where contaminants are visible.
 - a. Notify Contract Administrator and/or Using Agency to schedule cleanliness re-inspection.
- D. Surface Comparison Test for Porous Surfaces Only:
 - 1. If visual inspection is inconclusive or disputed, then perform Surface Comparison Test in accordance with ACR, The NADCA Standard.
 - a. Attach vacuum brush to operating contact vacuum.
 - b. Employ contact vacuum with HEPA-filtered discharge, capable of achieving minimum 80 inches w.g. static lift and fitted with 2.5-inch diameter round nylon brush attached to 1.5-inch diameter vacuum hose.
 - c. Pass brush over surface test area four times.
 - d. Visually compare tested and untested surfaces to determine whether visible surface characteristics are detectable.
 - 2. When surface comparison test is complete, HVAC component surface is considered acceptably clean if there is no visually detectable difference between tested and untested surface characteristics.
- E. NADCA Vacuum Test for Non-Porous Surfaces Only:
 - 1. When required, perform Vacuum Test in presence of Contract Administrator and/or Using Agency, and in accordance with ACR, The NADCA Standard.
 - 2. Apply NADCA Vacuum Test template to flowing-air side of component's surface.
 - 3. Attach vacuum cassette with filter media to calibrated air sampling pump and pass open face of filter cassette over two 2 cm x 25 cm openings marked on template.
 - 4. Pass vacuum cassette over system surfaces at 2 inches/second.
 - 5. When sampling is complete, prepare filter cassette and weigh it to determine total amount of debris collected.
 - 6. Surface is considered acceptably clean, when net weight of debris collected on filter cassette is less than 0.75 mg/100 cm².

3.13 SYSTEM STARTUP

- A. Install closures over services access openings before allowing system restart for normal facility operation.

- B. When system is placed in operation, remove temporary filter elements after minimum 24 hours operation.
- C. Systems shall be started and placed into operation by Using Agency personnel.

3.14 DISPOSAL OF JOB SITE DUCT CLEANING WASTE

- A. Seal HVAC system debris and removed contaminated materials in containers before removal from work area.
- B. Handle materials classified as hazardous by governmental agencies in accordance with applicable federal, state, and local, regulations and codes.
- C. Dispose of debris removed from HVAC System in accordance with applicable federal, state, and local requirements.

END OF SECTION

SECTION 23 0713**DUCT INSULATION****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Duct insulation.
- B. Insulation jackets.

1.02 RELATED REQUIREMENTS

- A. Section 23 0553 - Identification for Piping and Equipment.
- B. Section 23 3100 - HVAC Ducts and Casings.
- C. Drawing schedules.

1.03 REFERENCE STANDARDS

- A. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2015.
- B. ASTM C553 - Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications; 2013.
- C. ASTM C612 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation; 2014.
- D. ASTM C916 - Standard Specification for Adhesive for Duct Thermal Insulation; 2014.
- E. ASTM C1071 - Standard Specification for Fibrous Glass Duct Lining Insulation (Thermal and Sound Absorbing Material); 2012.
- F. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- G. ASTM E98/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2010.
- H. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2009.
- I. SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible; 2005 (Rev. 2009).
- J. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials; Current Edition, Including all Revisions.

1.04 SUBMITTALS

- A. See Division 01 for submittal and substitution procedures.
- B. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.
- C. Manufacturer's Instructions: Indicate installation procedures necessary to ensure acceptable workmanship and that installation standards will be achieved.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section with not less than three years of experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified in this section, with minimum three years of experience and approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Accept materials on site in original factory packaging, labelled with manufacturer's identification, including product density and thickness.
- B. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

1.07 FIELD CONDITIONS

- A. Maintain ambient temperatures and conditions required by manufacturers of adhesives, mastics, and insulation cements.
- B. Maintain temperature during and after installation for minimum period of 24 hours.

PART 2 PRODUCTS**2.01 REQUIREMENTS FOR ALL PRODUCTS OF THIS SECTION**

- A. Surface Burning Characteristics: Flame spread/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84.

2.02 GLASS FIBER, FLEXIBLE

- A. Manufacturer:
 - 1. Knauf Insulation: www.knaufusa.com.
 - 2. Johns Manville Corporation: MicroLite FSK Duct Wrap Type 100 with FSK Tape www.jm.com.
 - 3. Owens Corning Corp: www.owenscorning.com.
 - 4. CertainTeed Corporation; www.certainteed.com.
 - 5. Substitutions: See Division 01 for substitutional procedures.
- B. Insulation: ASTM C553; flexible, noncombustible blanket.
 - 1. 'K' value: 0.28 at 75 degrees F, when tested in accordance with ASTM C518.
 - 2. Maximum Service Temperature: 250 degrees F.
 - 3. Maximum Water Vapor Sorption: 5.0 percent by weight.
- C. Vapor Barrier Jacket:
 - 1. Kraft paper with glass fiber yarn and bonded to aluminized film.
 - 2. Moisture Vapor Permeability: 0.02 perm inch, when tested in accordance with ASTM E96/E96M.
 - 3. Secure with pressure sensitive tape.
- D. Vapor Barrier Tape:
 - 1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.

2.03 GLASS FIBER, RIGID

- A. Manufacturers:
 - 1. Knauf Insulation: www.knaufusa.com.
 - 2. Johns Manville Corporation; Model Linacoustic RC: www.jm.com.
 - 3. Owens Corning Corp: www.owenscorning.com.
 - 4. CertainTeed Corporation; www.certainteed.com.
 - 5. Substitutions: See Division 01.
- B. Insulation: ASTM C612; rigid, noncombustible blanket.
 - 1. 'K' Value: 0.24 at 75 degrees F, when tested in accordance with ASTM C518.
 - 2. Maximum Service Temperature: 450 degrees F.
 - 3. Maximum Water Vapor Absorption: 5.0 percent.
 - 4. Maximum Density: 8.0 lb/cu ft.

- C. Vapor Barrier Jacket:
 - 1. Kraft paper with glass fiber yarn and bonded to aluminized film; 0.0032 inch.
 - 2. Moisture Vapor Permeability: 0.02 perm inch, when tested in accordance with ASTM E96/E96M.
 - 3. Secure with pressure sensitive tape.
- D. Vapor Barrier Tape:
 - 1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.
- D. Indoor Vapor Barrier Finish:
 - 1. Cloth: Untreated; 9 oz/sq yd weight, glass fabric.
 - 2. Vinyl emulsion type acrylic, compatible with insulation, black color.

2.04 INSULATION JACKETING TAPES

- A. Manufacturers:
 - 1. 3M Industrial Adhesives and Tapes Division; VentureClad Insulation Jacketing Tapes.
 - 2. Substitutions: See Division 01.
- B. Zero permeability vapor barrier for insulation cladding and jacketing applications.
- C. Acrylic adhesive for cold (down to 10 deg F) or hot & humid conditions. Peel adhesive is 126 oz/in.
- D. White color with embossed surface. Product is 16 mils (0.40 mm) thick.
- E. Material has tensile strength of 184 lb/in. Elongation is 64%.
- F. Service temperature: -94 deg F to 248 deg F.
- G. ASTM E84 (flame/smoke rating): 20/30.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that ducts have been tested before applying insulation materials.
- B. Verify that surfaces are clean, foreign material removed, and dry.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in accordance with NAIMA National Insulation Standards
- C. Install rigid fiberglass board on exterior roof top ductwork so that there is a center ridge to the top surface insulation so that moisture drains off.
- D. Duct wrap insulation shall be installed with full contact to the duct.

END OF SECTION

AUG14'19 PM 3:28 DAS

MLC

130



State of New Hampshire

DEPARTMENT OF ADMINISTRATIVE SERVICES

25 Capitol Street - Room 120
Concord, New Hampshire 03301

Office@das.nh.gov

Charles M. Arlinghaus
Commissioner
(603) 271-3201

Joseph B. Bouchard
Assistant Commissioner
(603) 271-3204

Catherine A. Keane
Deputy Commissioner
(603) 271-2059

Division of Public Works
Design and Construction
Project No. 80970 - Contract D

August 7, 2019

His Excellency: Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

1). Authorize the Division of Public Works Design and Construction to enter into a contract with RTH Mechanical Contractors, Inc. (VC# 277973), Brentwood, NH, for a total price not to exceed \$2,282,320, for the Rebid of Air Handling System Upgrades at the New Hampshire Hospital, Concord, NH. This contract is effective upon Governor and Council approval through February 3, 2020, unless extended in accordance with the contract terms. **94% Capital - General Funds, 6% Federal Funds.**

2). Further authorize pursuant to 228:13, Laws of 2017, the amount of \$25,000 be approved for payment to the Department of Administrative Services, Division of Public Works Design and Construction (VC# 177875), Capital Clerk for oversight and engineering services provided, bringing the total to \$2,307,320. **100% Capital - General Funds.**

3). Further authorize the amount of \$1,000 be approved for payment to the Department of Administrative Services, Division of Public Works Design and Construction (VC# 177875), for engineering services provided, bringing the total to \$2,308,320. **94% General Funds, 6% Federal Funds.**

Funding is available in account titled Department of Health and Human Services (NH Hospital) as follows:

SFY20

05-94-94-940030-16980000 NH Hospital Air Handling Upgrades

034-500162 - Repair/Renovations Bldgs.	\$ 2,155,244
034-500162 - Interagency DPW Fees	<u>25,000</u>
	\$ 2,180,244

Funding is available in account titled Department of Health and Human Services (Commissioner's Office) as follows:

05-95-95-953010-56850000 Management Support

103-500736 - Contract Repairs, Building/Grounds	\$ 127,076
103-500736 - Interagency DPW Fees	<u>1,000</u>
	\$ 128,076

Grand Total	\$2,308,320
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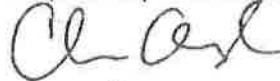
EXPLANATION

Per Chapter 228:1, X, G for the New Hampshire Hospital Air Handling System Upgrades, Concord, New Hampshire. This project will upgrade air handlers, exhaust fans and controls, which will refurbish four (4) air handlers and improvements to the HVAC system.

The contractor has been pre-qualified by the Department of Transportation. The contract has been approved by the Department of Justice as to form and execution, and the Department of Health and Human Services - New Hampshire Hospital has certified that the necessary funds are available. Copies of the fully executed contract are on file at the Secretary of State's Office and the Department of Administrative Services, Division of Public Works Design and Construction.

Attached please find a copy of the tabulation of bids for this project along with the contract supplemental information sheet.

Respectfully submitted,



Charles M. Arlinghaus
Commissioner

Department Estimate:	\$2,200,000
Contract Amount:	<u>\$2,282,320</u> (negotiated)
Over Estimate:	\$ 82,320

CONTRACT SUPPLEMENTAL INFORMATION SHEET

PROJECT: DPW Project No. 80970, Contract D - Rebid- New Hampshire Hospital Air Handling System Upgrades, Concord, New Hampshire

DESCRIPTION: Upgrading Air Handlers, exhaust fans and controls.

EXPLANATION: This request is to refurbish four air handlers and make many improvements to the HVAC system. The HVAC System is original 1989 and the components of the systems have reached the end of their useful life.

OVER ESTIMATE

EXPLANATION: The schedule to complete work is third shift and this raised the amount.

DEPARTMENT

ESTIMATE: \$2,200,000

LOW BID: \$2,282,320 (NEGOTIATED)



ABC Bid Data

CONCURRED
NOTES
FOR FEDERAL

PROJECT: CONCORD
STATE PROJECT NUMBER: 000000
FED. PROJECT NUMBER: NON-FEDERAL
DATE BIDS OPEN: May 15, 2019, 02:00 PM
SCOPE OF WORK: RISED IN NOISE/PTM AIR HANDLING SYSTEM UPGRADES
COMPLETION DATE: February 03, 2020
LOCATION: Merrimack

Issued by: _____

Summary of Bidders

Contractor	Bid Amount	Rank
RTH MECHANICAL CONTRACTORS INC 89 PINE ROAD, ERENTWOOD NH 03833-6510	\$2,395,270.00	A
CARENO CONSTRUCTION CO., LLC 270 WEST ROAD, STE 4, PORTSMOUTH NH 03801-7811	\$3,100,000.00	B

901 = \$ 112,950.-
902 = \$ 151,725.-
903 = \$ 2,030,595.-
904 = \$ 100,000.-
Total = \$ 2,395,270.-
Less 901 = \$ 112,950.-
\$ 2,282,320.-

BUREAU OF PUBLIC WORKS
Award to RTH Mechanical Contractors, Inc.
Hold for Negotiation
Cancel Contract
User Agency HHS
Authorized by 722
Date 6/17/2019

Item No.	Description	Unit	Quantity	P&E		RTH MECHANICAL CONTRACTORS INC 88 PINE ROAD BRENTWOOD, NH 03833-8110		CARENO CONSTRUCTION CO., LLC 270 WEST ROAD, STE 4 PORTSMOUTH, NH 03801-7611	
				Unit Price	Total	Unit Price	Total	Unit Price	Total

Items

001	REMOVE AND REPLACE STEAM TRAPS	U	1.00	\$80,000.00	\$80,000.00	\$112,960.00	\$112,960.00	\$80,000.00	\$80,000.00
002	REMOVE AND REPLACE EXHAUST FANS	U	1.00	\$100,000.00	\$100,000.00	\$151,725.00	\$151,725.00	\$95,000.00	\$95,000.00
003	REMAINING WORK FOR AIR HANDLER SYSTEM UPGRADES	U	1.00	\$1,840,000.00	\$1,840,000.00	\$2,030,585.00	\$2,030,585.00	\$2,625,000.00	\$2,625,000.00
004	ALLOWANCE FOR OWNERS CHANGES FOR UNKNOWN LATENT OR DIFFERING EXISTING CONDITIONS	\$	\$100,000.00	\$1.00	\$100,000.00	\$1.00	\$100,000.00	\$1.00	\$100,000.00
Totals:					\$2,200,000.00		\$2,395,270.00		\$3,100,000.00
All Totals:									
Totals:					\$2,200,000.00		\$2,395,270.00		\$3,100,000.00



RTHMECH-01

NMARBLE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/31/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 1780862
HUB International New England
275 US Route 1
Cumberland Foreside, ME 04110

CONTACT NAME:
PHONE (A/C, No, Ext): (207) 829-3450 FAX (A/C, No): (207) 829-6350
E-MAIL ADDRESS:

INSURED

RTH Mechanical Contractors Inc., State of NH, Dept of Administrative Services, any and all subs and all their subs
99 Pine Rd
Brentwood, NH 03833

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: Massachusetts Bay Insurance Company	22306
INSURER B: Hanover Insurance Company	22292
INSURER C: MEMIC Indemnity Company	11030
INSURER D: Hanover American Insurance	36064
INSURER E:	
INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT 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. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOL SUBR DIND YVVD	POLICY NUMBER	POLICY EFF RM/DM/YYMM	POLICY EXP RM/DM/YYMM	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	X	ZDPD172384	2/20/2019	2/20/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (EA OCCURRENCE) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPROP AGG \$ 2,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	X	AWPD172384	2/20/2019	2/20/2020	COMBINED SINGLE LIMIT (EA ACCIDENT) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> OCCUR CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0	X	UHPD172367	2/20/2019	2/20/2020	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ Aggregate \$ 10,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETARY PARTNER/EXECUTIVE OFFICER/OWNER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N/A	5101800158	2/20/2019	2/20/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Bldg Risk All Risk		LHPD943900	5/31/2019	5/31/2020	Limit Ded \$2500 2,282,320
D	OCP		LHPD950356	5/31/2019	5/31/2020	2,000,000 per occ. 3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Job #19-038

Richard T Hansell excluded from Work Comp

Project Re-Bid NH Hospital Air Handling Systems Upgrades, Project No. 80970D in Concord, NH. State of New Hampshire is hereby listed as an additional insured on the General Liability, Automobile & Umbrella policy per the terms and conditions of their written contract. The OCP policy is for the benefit of the State of New Hampshire Department of Administrative Services. The Builders Risk policy is in the name of RTH Mechanical Contractors, Inc. & State of NH, Dept. Of Administrative Services, any and all subs and all their subs.

CERTIFICATE HOLDER

CANCELLATION

State of New Hampshire
C/O Department of Administrative Services
7 Hazen Drive, Room 250
Concord, NH 03302

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

PROJECT NO. 80970 ALTERATION ORDER NO. 5
Contract D APPROPRIATION ACCOUNT NO.
CONTRACT NO. 7002802-1/7002804-1
Date 2/3/21 CONTINGENCY NO.
Vendor No. 277973 B001

TO: RTH Mechanical Contractors Inc, 17 Production Drive, Dover NH 03820-5917

In Connection With Your Contract Dated 8/7/2019 For Re-Bid NH Hospital Air Handling System Upgrades,
Concord, NH

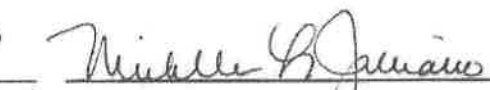
You are authorized to make the following changes in the Contract:

01 Extend contract completion date from September 22, 2020 to June 30, 2021.	\$0.00
All other terms and conditions of the Contract remain the same.	<hr/> \$0.00

ACCEPTED BY: Date: 2-8-21

APPROVED BY:


RTH Mechanical Contractors Inc


Theodore Kupper, P.E.
Administrator
Division of Public Works Design & Construction

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

PROJECT NO. 80970
Contract D

ALTERATION ORDER NO. 4

APPROPRIATION ACCOUNT NO.

CONTRACT NO. 7002802-1/7002804-1

Date 12/30/20

CONTINGENCY NO.

Vendor No. 277973 B001

TO: RTH Mechanical Contractors Inc, 17 Production Drive, Dover NH 03820-5917

In Connection With Your Contract Dated 8/7/2019 For Re-Bid NH Hospital Air Handling System Upgrades,
Concord, NH

You are authorized to make the following changes in the Contract:

01 Time extension from August 7, 2020 to September 22, 2020 per letter dated December 30,
2020. \$0.00

All other terms and conditions of the Contract remain the same.

\$0.00

ACCEPTED BY: Date: _____

APPROVED BY:

RTH Mechanical Contractors Inc

Theodore Kupper, P.E.
Administrator
Division of Public Works Design & Construction

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

ECT NO. 80970
Contract D

ALTERATION ORDER NO. 3

APPROPRIATION ACCOUNT NO.

CONTRACT NO. 7002802-1/7002804-1

CONTINGENCY NO.

te 7/14/20

Vendor No. 277973 B001

TO: RTH Mechanical Contractors Inc, 17 Production Drive, Dover NH 03820-5917

In Connection With Your Contract Dated 8/7/2019 For Re-Bid NH Hospital Air Handling System Upgrades,
Concord, NH

You are authorized to make the following changes in the Contract:

01 Time extension from July 13, 2020 to August 7, 2020 per email dated July 13, 2020


\$0.00

All other terms and conditions of the Contract remain the same.

\$0.00

ACCEPTED BY: Date: _____

APPROVED BY:


RTH Mechanical Contractors Inc


Theodore Kupper, P.E.
Administrator

Division of Public Works Design & Construction

RECEIVED

AUG 03 2020

DIV OF PUBLIC WORKS

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

PROJECT NO. 80970
Contract D

ALTERATION ORDER NO. 2

APPROPRIATION ACCOUNT NO.

CONTRACT NO.

7002802-1/7002804-1

Date 6/11/20

CONTINGENCY NO.

Vendor No. 277973 B001

TO: RTH Mechanical Contractors Inc, 17 Production Drive, Dover NH 03820-5917

In Connection With Your Contract Dated 8/7/2019 For Re-Bid NH Hospital Air Handling System Upgrades,
Concord, NH

You are authorized to make the following changes in the Contract:

01 Extend contract completion date from June 1, 2020 to July 13, 2020. Due to COVID-19.
All other terms and conditions of the Contract remain the same.

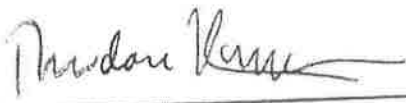
\$0.00

\$0.00

ACCEPTED BY: Date: _____

APPROVED BY:


RTH Mechanical Contractors Inc


Theodore Kupper, P.E.
Administrator
Division of Public Works Design & Construction

RECEIVED

JUN 25 2020

DIV OF PUBLIC WORKS

Post # 711

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

PROJECT NO. 80970
Contract D

ALTERATION ORDER NO. 1
APPROPRIATION ACCOUNT NO. 7002802-1/7002804-1
CONTRACT NO.
CONTINGENCY NO.

Date 1/3/20

Vendor No. 277973 B001

TO: RTH Mechanical Contractors Inc, 99 Pine Road, Brentwood NH 03833-6510

In Connection With Your Contract Dated 8/7/2019 For Re-Bid NH Hospital Air Handling System Upgrades,
Concord, NH

You are authorized to make the following changes in the Contract:

01 Time extension from February 3, 2020 to June 1, 2020 per letter from RTH Mechanical
Contractors Inc. dated December 16, 2019

\$0.00

All other terms and conditions of the Contract remain the same.

\$0.00

ACCEPTED BY:

Date: _____

APPROVED BY:


RTH Mechanical Contractors Inc


Theodore Kupper, P.E.
Administrator
Division of Public Works Design & Construction

RECEIVED
JAN 23 2020
DIV OF PUBLIC WORKS

