

OFFICE OF THE  
EXECUTIVE ASSISTANT



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## Town of Hudson

MASSACHUSETTS 01749-2134

To: Select Board  
Finance Committee

From: Thomas Gregory

Date: April 4, 2024

Re: Supplemental Funding for Fire Headquarters Building Renovation Project

On March 14, 2024, we received the cost estimate for the Fire Headquarters Building Renovation Project. The total construction cost, including contingency, came to \$3,238,571, an amount which far exceeds the project budget as currently funded. The purpose of this memorandum is to provide a recommendation to appropriate additional funds at the Annual Town Meeting to complete this project with a reduced scope.

I would like to provide a brief background to this project. In the summer of 2022, the Town contracted with Colliers International, the OPM which had represented the Town in 2004 when Fire Headquarters was originally constructed. I presented to the Board in September of 2022 a preliminary estimate of \$1,122,000 for design and construction costs that Colliers had assembled to replace the membrane and sloped roofs, replace the rooftop air-handling units, replace the overhead doors to the apparatus bay, and complete a number of smaller-scale renovations throughout the building. (Colliers had also prepared a cost estimate of \$1,326,600 for building renovations for Station #1).

In November of 2022, Town Meeting approved a borrowing authorization of \$1,122,000 for the Fire Headquarters Building Renovation Project (Article #14). In May of 2023, the Town contracted with Context Architecture for full design services for this project for a fee of \$157,700. Shortly after the contract was finalized, Chief Johannes asked me to consider bidding separately the replacement of the apparatus bay overhead doors since the doors had been consistently malfunctioning and causing operational difficulties. Context Architecture agreed to bid this separately and is charging an additional \$12,000 design fee. In January of 2024, the Paul J. Rogan Company, Inc. was awarded the contract for the overhead door project – a contract valued at \$359,000. The balance in the project account is now \$587,300 as shown in the chart below:

Fire HQ Borrowing Authorization (Article #14 - 11/21/2022)	\$1,122,000
Full Design Services Contract (Context Architecture)	(\$157,700)
OHD Replacement Contract (Paul J. Rogan Co.) bid separately	(\$359,000)
Additional Design Services for OHD project	(\$12,000)
Additional Design Services – Revise Bid Package	(\$6,000)
<b>Remaining Funds</b>	<b>\$587,300</b>
03/14/2024 Cost Estimate	\$3,238,571
Budget Shortfall	(\$2,651,271)

Earlier in March, Chief Desautels, Neil Vaidya, and I met with the architect and requested that the estimator, A.M. Fogarty, present cost estimates for potential projects with reduced scopes (see Appendix A). After considering the options, we determined that it will be possible to fund Option 4 which includes the replacement of the membrane roof and replacement of the rooftop AHUs. We agreed that we would also carry an additional amount to have roofing contractor examine the area of the active leak in the sloped roof above the stairwell. There are no other active leaks in the sloped roof areas. The additional fee to revise the bid package is \$6,000.

To be able to fund Option 4 which estimates construction costs at \$1,711,491, it will be necessary to transfer \$1,200,000 from Free Cash at the Annual Town Meeting, and to eliminate from the FY2025 Capital Plan the \$400,000 Station #1 renovations. Article 12 on the Annual Town Meeting Warrant will allow a \$1,200,000 transfer from Free Cash, and I am recommending that Article 5 be amended by eliminating the \$400,000 building renovations to Station #1. This recommendation will allow the Fire Headquarters project to be completed first, and will postpone the start to the renovations needed at Station #1.

I appreciate the Board’s consideration of this request and I am available to answer questions.

cc: Jamie Desautels, Fire Chief  
Neil Vaidya, Finance Director

# Appendix A

**Town of Hudson**

# **FIRE HEADQUARTERS**

**Hudson, Massachusetts  
01749**

## **Bid Estimate / VE Options**

Date of Issue:

25-Mar-24

PREPARED BY



65 Franklin Street. 5th Floor  
Boston, MA 02110

Project #2313.00

# Value Engineering Options

## Original Scope Estimate

The scope includes:

- Replacement of the carpet finish and rubber base in all areas except for the Watch RM. and Training RM.
- Exterior Paint for Fascia and OVHD metal frames.
- Interior Paint of all living and admin spaces.
- Replacement of Stair A ceiling
- App. Bay concrete crack repairs.
- Front apron replacement replacement.
- Replacement of all light fixture.
- Replacement of all roof areas including Patio, Sloped, and Flat Roof areas.
- Replacement of HVAC equipments including any nessecary code upgrade requirements.

Base Estimate			TOTAL	2,347,379
General Conditions	10%	of base estimate		<u>234,738</u>
				2,582,117
General Administrative O&P	8%			<u>206,569</u>
				2,788,686
P&P Bond, Permit Insurance	3%			<u>83,661</u>
				2,872,347
Design Contingency	10%			<u>287,235</u>
				3,159,581
Escalation (summer 2024)	3%			78,990
			<b>TOTAL CONSTRUCTION COST</b>	<b>3,238,571</b>

## Option 1

Deduction from the original estimated scope:

- Remove all carpet replacement scope.
- Remove all exterior paint scope.
- Remove all interior paint scope except for replacing and painting of Stair A ceiling.
- Remove App. Bay concrete repairs.
- Remove front apron replacement.
- Remove all light fixture replacement.

Base Estimate			TOTAL	1,607,777
General Conditions	10%	of base estimate		<u>160,778</u>
				1,768,554
General Administrative O&P	8%			<u>141,484</u>
				1,910,039
P&P Bond, Permit Insurance	3%			<u>57,301</u>
				1,967,340
Design Contingency	10%			<u>196,734</u>
				2,164,074
Escalation (summer 2024)	3%			54,102
			<b>TOTAL CONSTRUCTION COST</b>	<b>2,218,176</b>

## Option 2

Deduction from Option 1 scope:

- Remove roofing and pavers replacement on the 2nd floor patio.

Base Estimate			TOTAL	1,560,077
General Conditions	10%	of base estimate		<u>156,008</u>
				1,716,084
General Administrative O&P	8%			<u>137,287</u>
				1,853,371
P&P Bond, Permit Insurance	3%			<u>55,601</u>
				1,908,972
Design Contingency	10%			<u>190,897</u>
				2,099,870
Escalation (summer 2024)	3%			52,497
<b>TOTAL CONSTRUCTION COST</b>				<b>2,152,366</b>

## Option 3

Deduction from Option 2 scope:

- Reduce the scope of replacing the sloped roof to include the area above the second floor (living quarter).

\* Note: this area will be replaced entirely with a new asphalt shingles. Partial replacement of the existing roof will not be possible unless it was replaced by similar material (synthetic slate roof tiles). The new roof will be visible from the street level and from the parking area.

Base Estimate			TOTAL	1,387,617
General Conditions	10%	of base estimate		<u>138,762</u>
				1,526,378
General Administrative O&P	8%			<u>122,110</u>
				1,648,489
P&P Bond, Permit Insurance	3%			<u>49,455</u>
				1,697,943
Design Contingency	10%			<u>169,794</u>
				1,867,738
Escalation (summer 2024)	3%			46,693
<b>TOTAL CONSTRUCTION COST</b>				<b>1,914,431</b>

## Option 4

Deduction from Option 3 scope:

- Remove the replacement of the sloped roof entirely.
- Remove all interior paint and ceiling replacement at Stair A.

Base Estimate			TOTAL	1,240,522
General Conditions	10%	of base estimate		<u>124,052</u>
				1,364,574
General Administrative O&P	8%			<u>109,166</u>
				1,473,740
P&P Bond, Permit Insurance	3%			<u>44,212</u>
				1,517,952
Design Contingency	10%			<u>151,795</u>
				1,669,747
Escalation (summer 2024)	3%			41,744
			<b>TOTAL CONSTRUCTION COST</b>	<b>1,711,491</b>

## Option 5

addition to Option 4 scope:

- Partial replacement of the sloped roof in syntactic slate roof tiles. Limited to area with water leak damage.
- Replace ceiling board and paint at Stair A

Base Estimate			TOTAL	1,336,032
General Conditions	10%	of base estimate		<u>133,603</u>
				1,469,635
General Administrative O&P	8%			<u>117,571</u>
				1,587,206
P&P Bond, Permit Insurance	3%			<u>47,616</u>
				1,634,822
Design Contingency	10%			<u>163,482</u>
				1,798,304
Escalation (summer 2024)	3%			44,958
			<b>TOTAL CONSTRUCTION COST</b>	<b>1,843,262</b>

# Original Scope Estimate

The scope includes:

- Replacement of the carpet finish and rubber base in all areas except for the Watch RM. and Training RM.
- Exterior Paint for Fascia and OVHD metal frames.
- Interior Paint of all living and admin spaces.
- Replacement of Stair A ceiling
- App. Bay concrete crack repairs.
- Front apron replacement replacement.
- Replacement of all light fixture.
- Replacement of all roof areas including Patio, Sloped, and Flat Roof areas.
- Replacement of HVAC equipments including any nessecary code upgrade requirements.

Base Estimate			TOTAL	2,347,379
General Conditions	10%	of base estimate		<u>234,738</u>
				2,582,117
General Administrative O&P	8%			<u>206,569</u>
				2,788,686
P&P Bond, Permit Insurance	3%			<u>83,661</u>
				2,872,347
Design Contingency	10%			<u>287,235</u>
				3,159,581
Escalation (summer 2024)	3%			78,990
			<b>TOTAL CONSTRUCTION COST</b>	<b>3,238,571</b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				<hr/> 10,000
<b>DIVISION 03 - CONCRETE</b>				
033000 Cast In Place Concrete				
Apparatus Bay:				
Repair cracks and spalls	7,229	SF	3.00	21,687
Seal Concrete	7,229	SF	3.00	21,687
				<hr/> 43,374
<b>DIVISION 06 - WOOD PLASTICS &amp; COMPOSITES</b>				
061000 Rough Carpentry				
Roof:				
Replace roof sheathing - sloped	1,000	SF	8.50	8,500
				<hr/> 8,500
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTION</b>				
073000 Slope Roofing				
Sloped Roofing:				
Remove synthetic slate shingles & flashing	15,500	SF	5.00	77,500
Ice & water shield	3,600	SF	4.50	16,200
Perm drip edge	1,500	LF	5.50	8,250
Ridge vent	27	LF	55.00	1,485
Valley flashing	130	LF	65.00	8,450
Asphalt shingle	15,500	SF	11.54	178,870
				<hr/> 290,755
075000 Membrane Roofing				
Roof Patio:				
Remove wood decking	150	SF	5.00	750
Remove wood pavers	345	SF	10.00	3,450
Remove membrane roofing	495	SF	5.00	2,475
Membrane roofing & underlayment	495	SF	45.00	22,275
Reinstall pedestal pavers	250	SF	25.00	6,250
New pedestal pavers	250	SF	50.00	12,500
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				<hr/> 196,258
079000 Joint Protection				
New sealant at Patio wall	1	LS	1,500.00	1,500
				<hr/> 1,500



**DIVISION 09 - FINISHES**

092000 Plaster & Gypsum Board					
Patch & repair interior water damage	1	LS	10,000.00		10,000
					<hr/> 10,000
095100 Acoustical Ceilings					
Rework ACT at new MEP	9,075	SF	2.00		18,150
					<hr/> 18,150
096800 Carpeting					
First Floor:					
Remove carpet	4,220	SF	1.10		4,642
Floor prep - conc. Sub	2,972	SF	4.00		11,888
Floor prep - plywood sub	434	SF	2.00		868
Remove and reinstall door - SGL	3	EA	350.00		1,050
Remove & reinstall door - DBL	1	EA	500.00		500
New carpet tile	4,220	SF	6.50		27,430
Replace wall base	1,100	LF	6.00		6,600
					<hr/> 52,978
099000 Painting & Coating					
Paint OH door jambs	8	LOC	1,000.00		8,000
Paint Interiors	21,828	SF	4.00		87,312
Paint exterior eave trim	1,500	LF	20.00		30,000
					<hr/> 125,312

**DIVISION 21 - FIRE SUPPRESSION**

210000 Fire Suppression					
Modify ETR heads/branch as needed	21,828	GSF	1.00		21,828
					<hr/> 21,828

**DIVISION 22 - PLUMBING**

220000 Plumbing					
RTU Enabling:					
Demo disconnect gas connections at RTU	3	EA	350.00		1,050
Cut & Cap/ Male-safe	3	LOC	350.00		1,050
Reconnect gas to RTU & Test	3	EA	2,500.00		7,500
Misc. Gas piping allow	75	LF	55.00		4,125
Misc. Gas piping support allow	1	LS	2,500.00		2,500
Storm system modifications:					
Demo/replace RD type A,B,C	8	EA	2,000.00		16,000
CTE ETR Leader & Insulate	8	LOC	1,500.00		12,000
New sump at RD	8	EA	500.00		4,000
Paint gas pipe	1	LS	1,500.00		1,500
Misc. plumbing/As built	1	LS	10,000.00		10,000
					<hr/> 59,725

DIVISION 23 - HVAC

230000 HVAC

Mechanical Demolition:				
Disconnect & Dispose RTU	3	EA	3,500.00	10,500
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000
Disconnect EF & save	6	EA	500.00	3,000
Roof Top Unit:				
New RTU (Gas/DX)				
AHU-1	4,800	CFM	22.00	105,600
AHU-2	4,800	CFM	22.00	105,600
MUA-1	4,000	CFM	22.00	88,000
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500
Condensate w/ splash block	3	EA	750.00	2,250
Merv filter	6	EA	2,500.00	15,000
Heating/Cooling Generation:				
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000
Piping/Valve and Connections	1	LS	30,000.00	30,000
Modify Duct at connections	1	LS	30,000.00	30,000
CTE S&R Duct main	6	LOC	2,000.00	12,000
AFMS	3	EA	1,500.00	4,500
Smoke dampers	6	LOC	400.00	2,400
Fiber board at S&R opening	6	LOC	1,000.00	6,000
Reconnect fans	6	EA	500.00	3,000
ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Seismic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000

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793,350

DIVISION 26 - ELECTRICAL

260000 Electrical

Electrical Disconnection:

Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914

Lighting fixtures & Ctrl.

EB	1	EA	650.00	650
EL	2	EA	280.00	560
Exit	18	EA	450.00	8,100
LP8	7	EA	480.00	3,360
LPC	4	EA	800.00	3,200
LR22	31	EA	300.00	9,300
LR24/24A/B/C	61	EA	380.00	23,180
LS4	22	EA	300.00	6,600
LS8	13	EA	480.00	6,240
LS8H	30	EA	480.00	14,400
LSV4	3	EA	300.00	900
LW4	6	EA	300.00	1,800
LWS	75	LF	60.00	4,500
RC1/1A/2/3	59	EA	400.00	23,600
RSH	9	EA	325.00	2,925
SL1	7	EA	550.00	3,850
SL2	4	EA	550.00	2,200
SL3	2	EA	550.00	1,100
SL4	1	EA	550.00	550
SL5	3	EA	550.00	1,650
UC	33	LF	80.00	2,640
Back Box	350	EA	45.00	15,750
MC Cable	8,500	LF	3.00	25,500
EMT	2,000	LF	6.00	12,000
Reconfigure lighting Ctrl.	21,828	GSF	1.25	27,285

Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
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Provide 110A/3P Breaker	1	EA	1,500.00	1,500
Provide 100A/3P Breaker	1	EA	1,200.00	1,200

Provide 20A/1P Breaker	1	EA	450.00	450
Tie-In to existing panel board	5	EA	1,000.00	5,000

Mech. Equip. Feeders				
100A Feed	200	LF	45.00	9,000
110A Feed	200	LF	40.00	8,000
20A Feed	500	LF	18.50	9,250
Reconnect Fan/Test	6	EA	1,000.00	6,000
VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000

Equip. Wiring & Connection:

Devices;				
WP GFCI at RTU	3	EA	315.00	945
Light at RTU	3	EA	750.00	2,250
Duct smoke detectors	6	EA	800.00	4,800
CO2 detector	6	EA	1,000.00	6,000
RTS	3	EA	280.00	840
MC Cable	1	LS	5,000.00	5,000
FA Test	1	LS	4,500.00	4,500
New Lighting Protection	1	LS	15,000.00	15,000
Remove & Reinstall device at ACT	1	ALLOW	5,000.00	5,000
Remove & Reinstall light at ACT	1	ALLOW	5,000.00	5,000
25% OH&P	1	LS	84,372.25	84,372
DJE	1	LS	50,000.00	50,000

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471,861

**DIVISION 31 - EARTHWORK**

310000 Earthwork

Remove Apparatus concrete slab	6,302	SF	7.50	47,265
Excavate sub base	240	CY	12.50	3,000
Disposal of soil	408	TONS	25.00	10,200
				<hr/>
				60,465

**DIVISION 32 - EXTERIOR IMPROVEMENTS**

321000 Bases, Ballasts and Paving

12" concrete apron	6,302	SF	26.50	167,003
12" gravel sub base	240	CY	68.00	16,320
				<hr/>
				183,323

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## Option 1

Deduction from the original estimated scope:

- Remove all carpet replacement scope.
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- Remove front apron replacement.
- Remove all light fixture replacement.

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General Conditions	10%	of base estimate		<u>160,778</u>
				1,768,554
General Administrative O&P	8%			<u>141,484</u>
				1,910,039
P&P Bond, Permit Insurance	3%			<u>57,301</u>
				1,967,340
Design Contingency	10%			<u>196,734</u>
				2,164,074
Escalation (summer 2024)	3%			54,102
			<b>TOTAL CONSTRUCTION COST</b>	<b>2,218,176</b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				<hr/> 10,000
<b>DIVISION 06 - WOOD PLASTICS &amp; COMPOSITES</b>				
061000 Rough Carpentry				
Roof:				
Replace roof sheathing - sloped	1,000	SF	8.50	8,500
				<hr/> 8,500
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTION</b>				
073000 Slope Roofing				
Sloped Roofing:				
Remove synthetic slate shingles & flashing	15,500	SF	5.00	77,500
Ice & water shield	3,600	SF	4.50	16,200
Perm drip edge	1,500	LF	5.50	8,250
Ridge vent	27	LF	55.00	1,485
Valley flashing	130	LF	65.00	8,450
Asphalt shingle	15,500	SF	11.54	178,870
				<hr/> 290,755
075000 Membrane Roofing				
Roof Patio:				
Remove wood decking	150	SF	5.00	750
Remove wood pavers	345	SF	10.00	3,450
Remove membrane roofing	495	SF	5.00	2,475
Membrane roofing & underlayment	495	SF	45.00	22,275
Reinstall pedestal pavers	250	SF	25.00	6,250
New pedestal pavers	250	SF	50.00	12,500
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				<hr/> 196,258
079000 Joint Protection				
New sealant at Patio wall	1	LS	1,500.00	1,500
				<hr/> 1,500
<b>DIVISION 09 - FINISHES</b>				
092000 Plaster & Gypsum Board				
Patch & repair interior water damage	1	LS	10,000.00	10,000
				<hr/> 10,000

099000 Painting & Coating					
Paint OH door jambs	8	LOC	1,000.00	8,000	
Paint Interiors	200	SF	4.00	800	
					<hr/>
					8,800

**DIVISION 21 - FIRE SUPPRESSION**

210000 Fire Suppression					
Modify ETR heads/branch as needed	21,828	GSF	1.00	21,828	
					<hr/>
					21,828

**DIVISION 22 - PLUMBING**

220000 Plumbing					
RTU Enabling:					
Demo disconnect gas connections at RTU	3	EA	350.00	1,050	
Cut & Cap/ Male-safe	3	LOC	350.00	1,050	
Reconnect gas to RTU & Test	3	EA	2,500.00	7,500	
Misc. Gas piping allow	75	LF	55.00	4,125	
Misc. Gas piping support allow	1	LS	2,500.00	2,500	
Storm system modifications:					
Demo/replace RD type A,B,C	8	EA	2,000.00	16,000	
CTE ETR Leader & Insulate	8	LOC	1,500.00	12,000	
New sump at RD	8	EA	500.00	4,000	
Paint gas pipe	1	LS	1,500.00	1,500	
Misc. plumbing/As built	1	LS	10,000.00	10,000	
					<hr/>
					59,725

**DIVISION 23 - HVAC**

230000 HVAC					
Mechanical Demolition:					
Disconnect & Dispose RTU	3	EA	3,500.00	10,500	
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000	
Disconnect EF & save	6	EA	500.00	3,000	
Roof Top Unit:					
New RTU (Gas/DX)					
AHU-1	4,800	CFM	22.00	105,600	
AHU-2	4,800	CFM	22.00	105,600	
MUA-1	4,000	CFM	22.00	88,000	
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500	
Condensate w/ splash block	3	EA	750.00	2,250	
Merv filter	6	EA	2,500.00	15,000	
Heating/Cooling Generation:					
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000	
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000	
Piping/Valve and Connections	1	LS	30,000.00	30,000	
Modify Duct at connections	1	LS	30,000.00	30,000	
CTE S&R Duct main	6	LOC	2,000.00	12,000	
AFMS	3	EA	1,500.00	4,500	
Smoke dampers	6	LOC	400.00	2,400	
Fiber board at S&R opening	6	LOC	1,000.00	6,000	
Reconnect fans	6	EA	500.00	3,000	

ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Seismic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000
				793,350

**DIVISION 26 - ELECTRICAL**

260000 Electrical

Electrical Disconnection:				
Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914
Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
Provide 110A/3P Breaker	1	EA	1,500.00	1,500
Provide 100A/3P Breaker	1	EA	1,200.00	1,200
Provide 20A/1P Breaker	1	EA	450.00	450
Tie-In to existing panel board	5	EA	1,000.00	5,000
Mech. Equip. Feeders				
100A Feed	200	LF	45.00	9,000
110A Feed	200	LF	40.00	8,000
20A Feed	500	LF	18.50	9,250
Reconnect Fan/Test	6	EA	1,000.00	6,000
VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000
Equip. Wiring & Connection:				
Devices;				
WP GFCI at RTU	3	EA	315.00	945
Light at RTU	3	EA	750.00	2,250
Duct smoke detectors	6	EA	800.00	4,800
CO2 detector	6	EA	1,000.00	6,000
RTS	3	EA	280.00	840
MC Cable	1	LS	5,000.00	5,000
FA Test	1	LS	4,500.00	4,500
New Lighting Protection	1	LS	15,000.00	15,000
25% OH&P	1	LS	31,412	31,412
DJE	1	LS	50,000.00	50,000
				207,061



## Option 2

Deduction from Option 1 scope:

- Remove roofing and pavers replacement on the 2nd floor patio.

Base Estimate			TOTAL	1,560,077
General Conditions	10%	of base estimate		<u>156,008</u>
				1,716,084
General Administrative O&P	8%			<u>137,287</u>
				1,853,371
P&P Bond, Permit Insurance	3%			<u>55,601</u>
				1,908,972
Design Contingency	10%			<u>190,897</u>
				2,099,870
Escalation (summer 2024)	3%			52,497
			<b>TOTAL CONSTRUCTION COST</b>	<b><u>2,152,366</u></b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				<hr/> 10,000
<b>DIVISION 06 - WOOD PLASTICS &amp; COMPOSITES</b>				
061000 Rough Carpentry				
Roof:				
Replace roof sheathing - sloped	1,000	SF	8.50	8,500
				<hr/> 8,500
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTION</b>				
073000 Slope Roofing				
Sloped Roofing:				
Remove synthetic slate shingles & flashing	15,500	SF	5.00	77,500
Ice & water shield	3,600	SF	4.50	16,200
Perm drip edge	1,500	LF	5.50	8,250
Ridge vent	27	LF	55.00	1,485
Valley flashing	130	LF	65.00	8,450
Asphalt shingle	15,500	SF	11.54	178,870
				<hr/> 290,755
075000 Membrane Roofing				
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				<hr/> 148,558
079000 Joint Protection				
New sealant at Patio wall	1	LS	1,500.00	1,500
				<hr/> 1,500
<b>DIVISION 09 - FINISHES</b>				
092000 Plaster & Gypsum Board				
Patch & repair interior water damage	1	LS	10,000.00	10,000
				<hr/> 10,000
099000 Painting & Coating				
Paint OH door jambs	8	LOC	1,000.00	8,000
Paint Interiors	200	SF	4.00	800
				<hr/> 8,800
<b>DIVISION 21 - FIRE SUPPRESSION</b>				
210000 Fire Suppression				
Modify ETR heads/branch as needed	21,828	GSF	1.00	21,828
				<hr/> 21,828

**DIVISION 22 - PLUMBING**

220000 Plumbing

RTU Enabling:				
Demo disconnect gas connections at RTU	3	EA	350.00	1,050
Cut & Cap/ Male-safe	3	LOC	350.00	1,050
Reconnect gas to RTU & Test	3	EA	2,500.00	7,500
Misc. Gas piping allow	75	LF	55.00	4,125
Misc. Gas piping support allow	1	LS	2,500.00	2,500
Storm system modifications:				
Demo/replace RD type A,B,C	8	EA	2,000.00	16,000
CTE ETR Leader & Insulate	8	LOC	1,500.00	12,000
New sump at RD	8	EA	500.00	4,000
Paint gas pipe	1	LS	1,500.00	1,500
Misc. plumbing/As built	1	LS	10,000.00	10,000
				59,725

**DIVISION 23 - HVAC**

230000 HVAC

Mechanical Demolition:				
Disconnect & Dispose RTU	3	EA	3,500.00	10,500
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000
Disconnect EF & save	6	EA	500.00	3,000
Roof Top Unit:				
New RTU (Gas/DX)				
AHU-1	4,800	CFM	22.00	105,600
AHU-2	4,800	CFM	22.00	105,600
MUA-1	4,000	CFM	22.00	88,000
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500
Condensate w/ splash block	3	EA	750.00	2,250
Merv filter	6	EA	2,500.00	15,000
Heating/Cooling Generation:				
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000
Piping/Valve and Connections	1	LS	30,000.00	30,000
Modify Duct at connections	1	LS	30,000.00	30,000
CTE S&R Duct main	6	LOC	2,000.00	12,000
AFMS	3	EA	1,500.00	4,500
Smoke dampers	6	LOC	400.00	2,400
Fiber board at S&R opening	6	LOC	1,000.00	6,000
Reconnect fans	6	EA	500.00	3,000
ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Seismic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000
				100,000

## DIVISION 26 - ELECTRICAL

## 260000 Electrical

## Electrical Disconnection:

Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914

Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
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Provide 110A/3P Breaker	1	EA	1,500.00	1,500
Provide 100A/3P Breaker	1	EA	1,200.00	1,200

Provide 20A/1P Breaker	1	EA	450.00	450
Tie-In to existing panel board	5	EA	1,000.00	5,000

## Mech. Equip. Feeders

100A Feed	200	LF	45.00	9,000
110A Feed	200	LF	40.00	8,000
20A Feed	500	LF	18.50	9,250
Reconnect Fan/Test	6	EA	1,000.00	6,000
VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000

## Equip. Wiring &amp; Connection:

## Devices;

WP GFCI at RTU	3	EA	315.00	945
Light at RTU	3	EA	750.00	2,250
Duct smoke detectors	6	EA	800.00	4,800
CO2 detector	6	EA	1,000.00	6,000
RTS	3	EA	280.00	840
MC Cable	1	LS	5,000.00	5,000
FA Test	1	LS	4,500.00	4,500
New Lighting Protection	1	LS	15,000.00	15,000
25% OH&P	1	LS	31,412	31,412
DJE	1	LS	50,000.00	50,000

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 207,061

## Option 3

Deduction from Option 2 scope:

- Reduce the scope of replacing the sloped roof to include the area above the second floor (living quarter).

\* Note: this area will be replaced entirely with a new asphalt shingles. Partial replacement of the existing roof will not be possible unless replaced by similar material (synthetic slate roof tiles). The new roof will be visible from the street level and from the parking area.

Base Estimate			TOTAL	1,387,617
General Conditions	10%	of base estimate		<u>138,762</u>
				1,526,378
General Administrative O&P	8%			<u>122,110</u>
				1,648,489
P&P Bond, Permit Insurance	3%			<u>49,455</u>
				1,697,943
Design Contingency	10%			<u>169,794</u>
				1,867,738
Escalation (summer 2024)	3%			46,693
			<b>TOTAL CONSTRUCTION COST</b>	<b>1,914,431</b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				<hr/> 10,000
<b>DIVISION 06 - WOOD PLASTICS &amp; COMPOSITES</b>				
061000 Rough Carpentry				
Roof:				
Replace roof sheathing - sloped	1,000	SF	8.50	8,500
				<hr/> 8,500
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTION</b>				
073000 Slope Roofing				
Sloped Roofing:				
Remove synthetic slate shingles & flashing	6,000	SF	5.00	30,000
Ice & water shield	1,660	SF	4.50	7,470
Perm drip edge	300	LF	5.50	1,650
Ridge vent	27	LF	55.00	1,485
Valley flashing	130	LF	65.00	8,450
Asphalt shingle	6,000	SF	11.54	69,240
				<hr/> 118,295
075000 Membrane Roofing				
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				<hr/> 148,558
079000 Joint Protection				
New sealant at Patio wall	1	LS	1,500.00	1,500
				<hr/> 1,500
<b>DIVISION 09 - FINISHES</b>				
092000 Plaster & Gypsum Board				
Patch & repair interior water damage	1	LS	10,000.00	10,000
				<hr/> 10,000
099000 Painting & Coating				
Paint OH door jambs	8	LOC	1,000.00	8,000
Paint Interiors	200	SF	4.00	800
				<hr/> 8,800
<b>DIVISION 21 - FIRE SUPPRESSION</b>				
210000 Fire Suppression				
Modify ETR heads/branch as needed	21,828	GSF	1.00	21,828
				<hr/> 21,828

**DIVISION 22 - PLUMBING**

220000 Plumbing

RTU Enabling:				
Demo disconnect gas connections at RTU	3	EA	350.00	1,050
Cut & Cap/ Male-safe	3	LOC	350.00	1,050
Reconnect gas to RTU & Test	3	EA	2,500.00	7,500
Misc. Gas piping allow	75	LF	55.00	4,125
Misc. Gas piping support allow	1	LS	2,500.00	2,500
Storm system modifications:				
Demo/replace RD type A,B,C	8	EA	2,000.00	16,000
CTE ETR Leader & Insulate	8	LOC	1,500.00	12,000
New sump at RD	8	EA	500.00	4,000
Paint gas pipe	1	LS	1,500.00	1,500
Misc. plumbing/As built	1	LS	10,000.00	10,000
				59,725

**DIVISION 23 - HVAC**

230000 HVAC

Mechanical Demolition:				
Disconnect & Dispose RTU	3	EA	3,500.00	10,500
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000
Disconnect EF & save	6	EA	500.00	3,000
Roof Top Unit:				
New RTU (Gas/DX)				
AHU-1	4,800	CFM	22.00	105,600
AHU-2	4,800	CFM	22.00	105,600
MUA-1	4,000	CFM	22.00	88,000
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500
Condensate w/ splash block	3	EA	750.00	2,250
Merv filter	6	EA	2,500.00	15,000
Heating/Cooling Generation:				
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000
Piping/Valve and Connections	1	LS	30,000.00	30,000
Modify Duct at connections	1	LS	30,000.00	30,000
CTE S&R Duct main	6	LOC	2,000.00	12,000
AFMS	3	EA	1,500.00	4,500
Smoke dampers	6	LOC	400.00	2,400
Fiber board at S&R opening	6	LOC	1,000.00	6,000
Reconnect fans	6	EA	500.00	3,000
ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Siesmic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000
				793,350

DIVISION 26 - ELECTRICAL

260000 Electrical

Electrical Disconnection:				
Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914
Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
Provide 110A/3P Breaker	1	EA	1,500.00	1,500
Provide 100A/3P Breaker	1	EA	1,200.00	1,200
Provide 20A/1P Breaker	1	EA	450.00	450
Tie-In to existing panel board	5	EA	1,000.00	5,000
Mech. Equip. Feeders				
100A Feed	200	LF	45.00	9,000
110A Feed	200	LF	40.00	8,000
20A Feed	500	LF	18.50	9,250
Reconnect Fan/Test	6	EA	1,000.00	6,000
VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000
Equip. Wiring & Connection:				
Devices;				
WP GFCI at RTU	3	EA	315.00	945
Light at RTU	3	EA	750.00	2,250
Duct smoke detectors	6	EA	800.00	4,800
CO2 detector	6	EA	1,000.00	6,000
RTS	3	EA	280.00	840
MC Cable	1	LS	5,000.00	5,000
FA Test	1	LS	4,500.00	4,500
New Lighting Protection	1	LS	15,000.00	15,000
25% OH&P	1	LS	31,412	31,412
DJE	1	LS	50,000.00	50,000

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## Option 4

Deduction from Option 3 scope:

- Remove the replacement of the sloped roof entirely.
- Remove all interior paint and ceiling replacement at Stair A.

Base Estimate			TOTAL	1,240,522
General Conditions	10%	of base estimate		<u>124,052</u>
				1,364,574
General Administrative O&P	8%			<u>109,166</u>
				1,473,740
P&P Bond, Permit Insurance	3%			<u>44,212</u>
				1,517,952
Design Contingency	10%			<u>151,795</u>
				1,669,747
Escalation (summer 2024)	3%			41,744
			<b>TOTAL CONSTRUCTION COST</b>	<b>1,711,491</b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				10,000
075000 Membrane Roofing				
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				148,558
<b>DIVISION 21 - FIRE SUPPRESSION</b>				
210000 Fire Suppression				
Modify ETR heads/branch as needed	21,828	GSF	1.00	21,828
				21,828
<b>DIVISION 22 - PLUMBING</b>				
220000 Plumbing				
RTU Enabling:				
Demo disconnect gas connections at RTU	3	EA	350.00	1,050
Cut & Cap/ Male-safe	3	LOC	350.00	1,050
Reconnect gas to RTU & Test	3	EA	2,500.00	7,500
Misc. Gas piping allow	75	LF	55.00	4,125
Misc. Gas piping support allow	1	LS	2,500.00	2,500
Storm system modifications:				
Demo/replace RD type A,B,C	8	EA	2,000.00	16,000
CTE ETR Leader & Insulate	8	LOC	1,500.00	12,000
New sump at RD	8	EA	500.00	4,000
Paint gas pipe	1	LS	1,500.00	1,500
Misc. plumbing/As built	1	LS	10,000.00	10,000
				59,725
<b>DIVISION 23 - HVAC</b>				
230000 HVAC				
Mechanical Demolition:				
Disconnect & Dispose RTU	3	EA	3,500.00	10,500
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000
Disconnect EF & save	6	EA	500.00	3,000
Roof Top Unit:				
New RTU (Gas/DX)				
AHU-1	4,800	CFM	22.00	105,600
AHU-2	4,800	CFM	22.00	105,600
MUA-1	4,000	CFM	22.00	88,000
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500
Condensate w/ splash block	3	EA	750.00	2,250
Merv filter	6	EA	2,500.00	15,000

Heating/Cooling Generation:				
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000
Piping/Valve and Connections	1	LS	30,000.00	30,000
Modify Duct at connections	1	LS	30,000.00	30,000
CTE S&R Duct main	6	LOC	2,000.00	12,000
AFMS	3	EA	1,500.00	4,500
Smoke dampers	6	LOC	400.00	2,400
Fiber board at S&R opening	6	LOC	1,000.00	6,000
Reconnect fans	6	EA	500.00	3,000
ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Seismic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000
				793,350

## DIVISION 26 - ELECTRICAL

### 260000 Electrical

Electrical Disconnection:				
Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914
Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
Provide 110A/3P Breaker	1	EA	1,500.00	1,500
Provide 100A/3P Breaker	1	EA	1,200.00	1,200
Provide 20A/1P Breaker	1	EA	450.00	450
Tie-In to existing panel board	5	EA	1,000.00	5,000
Mech. Equip. Feeders				
100A Feed	200	LF	45.00	9,000
110A Feed	200	LF	40.00	8,000
20A Feed	500	LF	18.50	9,250
Reconnect Fan/Test	6	EA	1,000.00	6,000
VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000
Equip. Wiring & Connection:				
Devices;				
WP GFCI at RTU	3	EA	315.00	945
Light at RTU	3	EA	750.00	2,250
Duct smoke detectors	6	EA	800.00	4,800
CO2 detector	6	EA	1,000.00	6,000
RTS	3	EA	280.00	840
MC Cable	1	LS	5,000.00	5,000
FA Test	1	LS	4,500.00	4,500
New Lighting Protection	1	LS	15,000.00	15,000
25% OH&P	1	LS	31,412	31,412
DJE	1	LS	50,000.00	50,000
				207,061

## Option 5

addition to Option 4 scope:

- Partial replacement of the sloped roof in syntactic slate roof tiles. Limited to area with water leak damage.
- Replace ceiling board and paint at Stair A

Base Estimate			TOTAL	1,336,032
General Conditions	10%	of base estimate	<u>133,603</u>	1,469,635
General Administrative O&P	8%		<u>117,571</u>	1,587,206
P&P Bond, Permit Insurance	3%		<u>47,616</u>	1,634,822
Design Contingency	10%		<u>163,482</u>	1,798,304
Escalation (summer 2024)	3%			44,958
			<b>TOTAL CONSTRUCTION COST</b>	<b>1,843,262</b>

Description	Quantity	Unit	Unit Cost	Total
<b>DIVISION 02 - EXISTING CONDITIONS</b>				
024100 Demolition				
Dispose/ Clean-up/ Protect Areas of work	1	LS	10,000.00	10,000
				<hr/> 10,000
<b>DIVISION 06 - WOOD PLASTICS &amp; COMPOSITES</b>				
061000 Rough Carpentry				
Roof:				
Replace roof sheathing - sloped	1,000	SF	8.50	8,500
				<hr/> 8,500
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTION</b>				
073000 Slope Roofing				
Sloped Roofing:				
Remove synthetic slate shingles & flashing	2,000	SF	5.00	10,000
Ice & water shield	850	SF	4.50	3,825
Perm drip edge	100	LF	5.50	550
Ridge vent	27	LF	55.00	1,485
Valley flashing	90	LF	65.00	5,850
New Synthetic Slate Tiles	2,000	SF	22.50	45,000
				<hr/> 66,710
075000 Membrane Roofing				
Remove wall membrane	2,130	SF	3.75	7,988
New wall membrane	2,130	SF	12.00	25,560
Parapet cap	220	LF	35.00	7,700
Base flashing	210	LF	24.00	5,040
Main Flat Roof:				
Membrane TPO & tapered insulation	3,369	SF	30.00	101,070
Replace cover board	200	SF	6.00	1,200
				<hr/> 148,558
079000 Joint Protection				
New sealant at Patio wall	1	LS	1,500.00	1,500
				<hr/> 1,500
<b>DIVISION 09 - FINISHES</b>				
092000 Plaster & Gypsum Board				
Patch & repair interior water damage	1	LS	10,000.00	10,000
				<hr/> 10,000
099000 Painting & Coating				
Paint OH door jambs	8	LOC	1,000.00	8,000
Paint Interiors	200	SF	4.00	800
				<hr/> 8,800
<b>DIVISION 21 - FIRE SUPPRESSION</b>				
210000 Fire Suppression				
Modify ETR heads/branch as needed	21,828	GSF	1.00	21,828

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21,828

**DIVISION 22 - PLUMBING**

220000 Plumbing

RTU Enabling:				
Demo disconnect gas connections at RTU	3	EA	350.00	1,050
Cut & Cap/ Male-safe	3	LOC	350.00	1,050
Reconnect gas to RTU & Test	3	EA	2,500.00	7,500
Misc. Gas piping allow	75	LF	55.00	4,125
Misc. Gas piping support allow	1	LS	2,500.00	2,500
Storm system modifications:				
Demo/replace RD type A,B,C	8	EA	2,000.00	16,000
CTE ETR Leader & Insulate	8	LOC	1,500.00	12,000
New sump at RD	8	EA	500.00	4,000
Paint gas pipe	1	LS	1,500.00	1,500
Misc. plumbing/As built	1	LS	10,000.00	10,000
<hr/>				
59,725				

**DIVISION 23 - HVAC**

230000 HVAC

Mechanical Demolition:				
Disconnect & Dispose RTU	3	EA	3,500.00	10,500
Disconnect & Dispose HW Pumps	2	EA	1,500.00	3,000
Disconnect EF & save	6	EA	500.00	3,000
Roof Top Unit:				
New RTU (Gas/DX)				
AHU-1	4,800	CFM	22.00	105,600
AHU-2	4,800	CFM	22.00	105,600
MUA-1	4,000	CFM	22.00	88,000
Modify Roof Curbs w/ adapter	3	EA	3,500.00	10,500
Condensate w/ splash block	3	EA	750.00	2,250
Merv filter	6	EA	2,500.00	15,000
Heating/Cooling Generation:				
P-3 HHW Pump w/ VFD	1	EA	5,000.00	5,000
P-4 HHW Pump w/ VFD	1	EA	5,000.00	5,000
Piping/Valve and Connections	1	LS	30,000.00	30,000
Modify Duct at connections	1	LS	30,000.00	30,000
CTE S&R Duct main	6	LOC	2,000.00	12,000
AFMS	3	EA	1,500.00	4,500
Smoke dampers	6	LOC	400.00	2,400
Fiber board at S&R opening	6	LOC	1,000.00	6,000
Reconnect fans	6	EA	500.00	3,000
ATC Scope:				
AHU-1-2	2	EA	40,000.00	80,000
MUA-1	1	EA	25,000.00	25,000
P-3-4	2	EA	2,500.00	5,000
Test, graphics & integration	1	LS	50,000.00	50,000
Rigging	1	LS	60,000.00	60,000
Seismic & Vibration	1	LS	7,500.00	7,500
Coring & Firesafing	1	LS	4,500.00	4,500
Test & Balance	1	LS	20,000.00	20,000
Coordination, as-built, misc. GC	1	LS	100,000.00	100,000
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793,350				

**DIVISION 26 - ELECTRICAL**

260000 Electrical

Electrical Disconnection:

Demo & make-safe existing RTU disconnect	3	EA	1,500.00	4,500
Demo & make-safe at HW pumps	2	EA	1,500.00	3,000
Demo & make-safe existing EF	6	EA	500.00	3,000
Selective demol. Of light fixtures/devices	21,828	EA	0.50	10,914

Provide & Install RTU Disconnect switch	3	EA	7,500.00	22,500
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Provide 110A/3P Breaker	1	EA	1,500.00	1,500
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Provide 100A/3P Breaker	1	EA	1,200.00	1,200
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Provide 20A/1P Breaker	1	EA	450.00	450
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Tie-In to existing panel board	5	EA	1,000.00	5,000
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Mech. Equip. Feeders

100A Feed	200	LF	45.00	9,000
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110A Feed	200	LF	40.00	8,000
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20A Feed	500	LF	18.50	9,250
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Reconnect Fan/Test	6	EA	1,000.00	6,000
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VFDs (provided by HVAC) Wire only	2	EA	1,000.00	2,000
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Equip. Wiring & Connection:

Devices;

WP GFCI at RTU	3	EA	315.00	945
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Light at RTU	3	EA	750.00	2,250
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Duct smoke detectors	6	EA	800.00	4,800
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CO2 detector	6	EA	1,000.00	6,000
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RTS	3	EA	280.00	840
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MC Cable	1	LS	5,000.00	5,000
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FA Test	1	LS	4,500.00	4,500
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New Lighting Protection	1	LS	15,000.00	15,000
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25% OH&P	1	LS	31,412	31,412
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DJE	1	LS	50,000.00	50,000
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207,061