

# Upper Dublin Township

## THE BOARD OF COMMISSIONERS

OCTOBER 10, 2023



D'HUY Engineering, Inc.  
Est. 1976

# UPPER DUBLIN TOWNSHIP – PROJECT GOALS



## PROJECT GOALS

Efficient Site Layout

Reduce Building Size

Reduce Stormwater on site

Improve Traffic Flow

Incorporate Sustainable Design

Provide Civic Presence

Improve Community Access to all Public Services

# UPPER DUBLIN TOWNSHIP – BID SCHEDULE



Base Bid Schedule		
1	Board of Commissioners Update	Tuesday, October 10, 2023
2	Internal Review / Bidding Doc Edits	Wednesday, November 1, 2023
3	Ad Date - 1	Wednesday, November 1, 2023
4	Ad Date - 2	Thursday, November 9, 2023
5	Ad Date - 3	Tuesday, November 14, 2023
6	Docs Released	Monday, November 20, 2023
7	Pre-Bid Conference (801 Loch Alsh Ave., Ft. Washington, PA 19034)	Tuesday, December 5, 2023 at 1:00 p.m.
8	Bids Due (370 Commerce Dr., Ft. Washington, PA 19034)	Thursday, January 11, 2024 at 2:00 p.m.
9	<i>Bids Due (ALT DATE)</i>	<i>Thursday, January 18, 2024 at 2:00 p.m.</i>
10	Board Committee Docs Due to Owner	Friday, January 19, 2024
11	<b>Special Board Meeting - Award</b>	<b>Tuesday, January 23, 2024</b>
12	Notice to Proceed	Thursday, February 15, 2024
13	Procurement & Submittals	Friday, February 16, 2024
14	Construction Start	Friday, February 16, 2024
15	<i>Early Construction Substantial Completion</i> <b>* No early incentive paid past 12/7/2025</b>	<i>Monday, November 17, 2025</i>
16	Construction Substantial Completion	Friday, December 12, 2025
17	<i>Early Construction Final Completion</i>	<i>Sunday, December 7, 2025</i>
18	Construction Final Completion	Monday, December 22, 2025

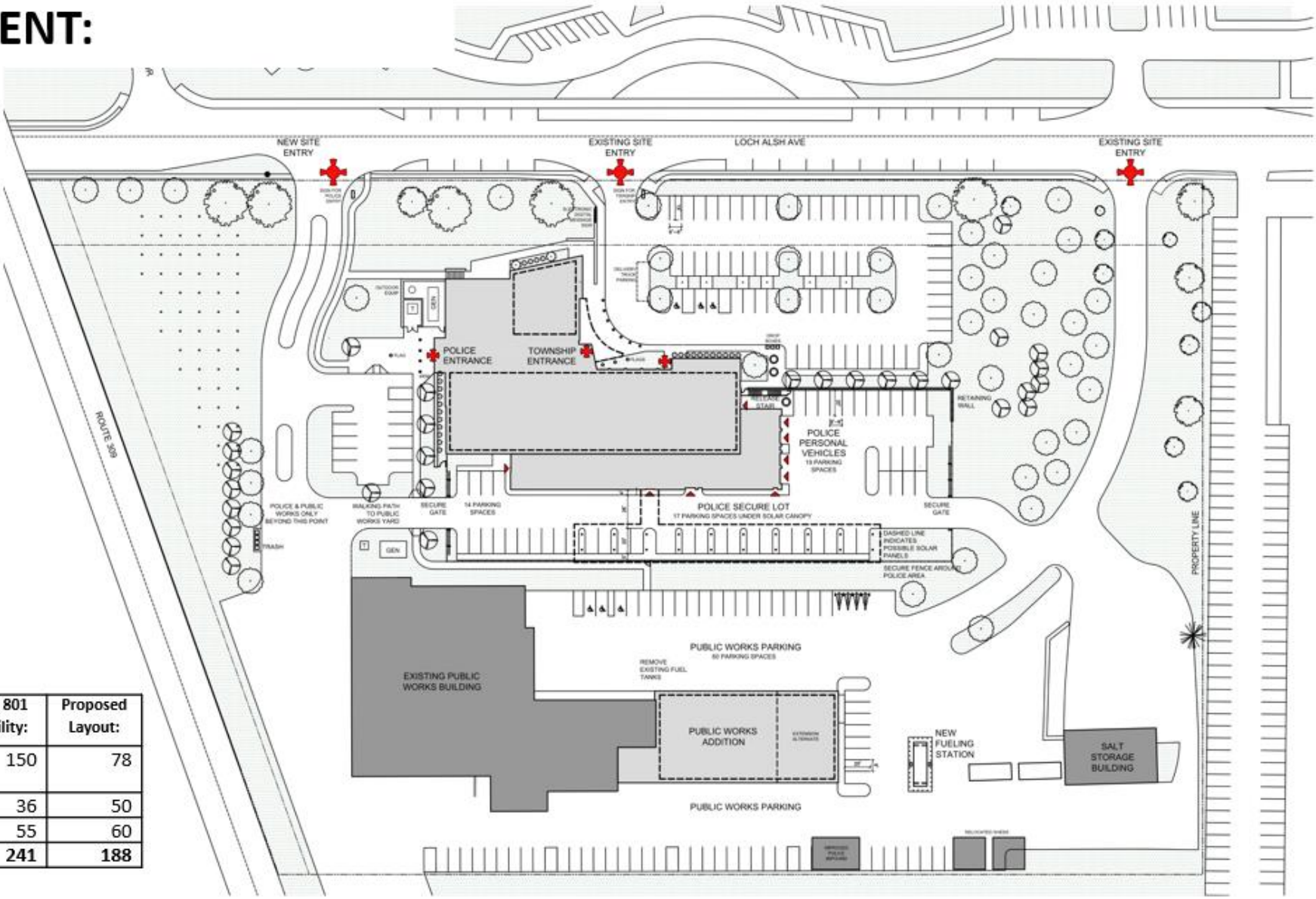
# UPPER DUBLIN TOWNSHIP – SITE DEVELOPMENT



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## SITE DEVELOPMENT:

- Three Site Entrances
- Public / Employee Parking
- Police Secure Lot
- Geothermal Wellfield



Summary / Comparison of Parking (current & Proposed)	Old 801 Facility:	Proposed Layout:
Public & Staff Parking (East & West Lots)	150	78
Police	36	50
Public Works	55	60
	<b>241</b>	<b>188</b>

# UPPER DUBLIN TOWNSHIP – EXTERIOR IMAGE



# UPPER DUBLIN TOWNSHIP – EXTERIOR MATERIALS



Supplier – Product: Stone  
Diener – Natural Facing Stone Veneer “Chesapeake”

Supplier – Product: Metal Panel  
ATAS – “Slate Grey”

Supplier – Product: Brick  
Diener/Church – Bowerston Brick “Santa Fe Wirecut Modular”

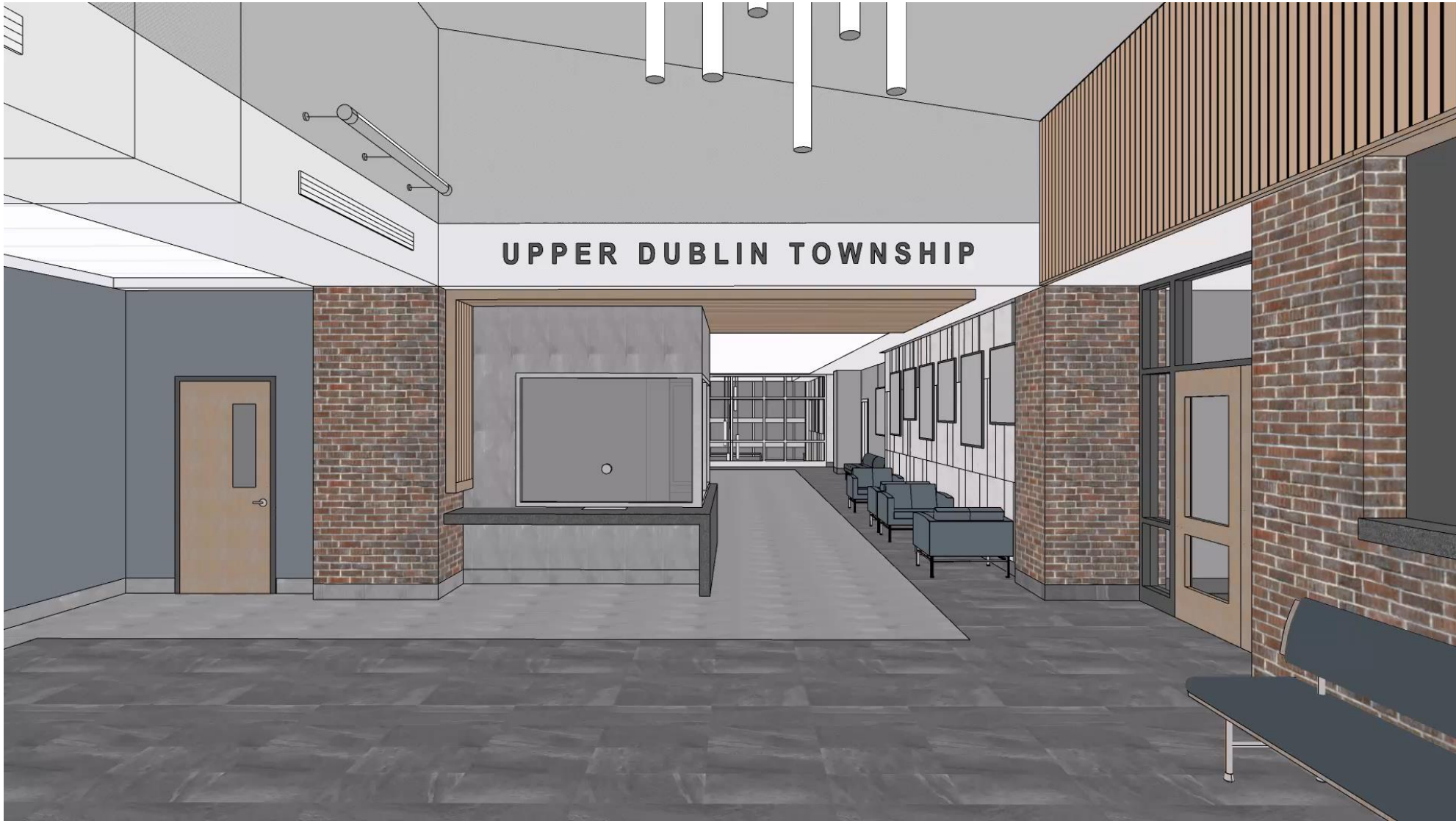


# UPPER DUBLIN TOWNSHIP – EXTERIOR IMAGE



Animated View of Site

# UPPER DUBLIN TOWNSHIP – INTERIOR IMAGE



Animated View of Building Interior



## LEED / SUSTAINABLE BUILDING OBJECTIVES

- Reduced Parking Footprint
- Electric Vehicle Charging Stations / Preferred Parking for Low Emission Vehicles
- Bicycle Racks & Showers
- Geothermal HVAC System
- Solar Panels (Bid as an Alternate)
- Well Insulated Envelope
- Compliance with BOC Resolution (21-2446) adopted December 14, 2021
- Targeting 100% Clean Energy with Solar Alternate
- LEED Points: Project Status = 48 confirmed / 54 potential
  - Certified = 40 Silver = 50 Gold = 60 Platinum = 80



# UPPER DUBLIN TOWNSHIP – BUDGET



Description	Estimated Cost
Option 3 New Township Project	\$37.5M
Crane Bay and Emergency Repairs Project	\$3.5M
Phase 1 of the Public Works Renovations Project	\$5.0M
Phase 2 of the Public Works Addition, Fueling Station, and Sitework (To be included with Township Building Replacement scope of work)	\$4.0M
Soft Costs for Phase 1 and Phase 2 of the Public Works Renovations and Additions Project.	\$2.2M
<b>SUBTOTAL</b>	<b>\$52.2M</b>
Insurance Reimbursement (\$20.5M + \$4.1M)	\$24.6M
Insurance Reimbursement Pending (TBD)	TBD
Township Funding	TBD

# UPPER DUBLIN TOWNSHIP – BUDGET



Item	Option 3 New Township Building Project 52,000 SF DD Budget	Crane Bay and Emergency Repairs Project	Phase 2 Public Works Renovations Bids Received May 19th, 2023 (Base Bid)	Phase 3 Public Works Addition 60% CD Budget March 28th, 2023 (Base Bid)
<b>General Construction Contractor</b>	\$ 18,701,900		\$ 1,769,000	\$ 3,375,000
#1 - Additional 2-Bay garage addition (including soft costs)				\$ 1,000,000
<b>Mechanical Construction Contractor</b>	\$ 4,004,000		\$ 835,000	\$ 335,000
<b>Electrical Construction Contractor</b>	\$ 3,793,000		\$ 1,472,000	\$ 490,000
<b>Plumbing Construction Contractor</b>	\$ 1,336,300		\$ 508,890	\$ 215,000
<b>TOTAL CONSTRUCTION COSTS</b>	\$ 27,835,200	\$ 3,295,286	\$ 4,584,890	\$ 4,415,000
<b>Design Fees, Permits, Approvals, 3rd Party Inspections, and FF&amp;E</b>	\$ 4,404,800	\$ -	\$ 1,006,000	\$ 354,000
<b>Construction Contingency</b>	\$ 2,500,000		\$ 290,000	\$ 550,000
<b>Design/Estimating Contingency &amp; Current Market Conditions</b>	\$ 2,760,000			
<b>TOTAL SOFT COSTS</b>	\$ 9,664,800	\$ -	\$ 1,296,000	\$ 904,000
<b>OWNER REQUEST &amp; UNFORSEEN CONDITIONS</b>		\$ 162,966		
<b>TOTAL PROJECT COSTS without FINANCING</b>	\$ 37,500,000	\$ 3,458,252	\$ 5,880,890	\$ 5,319,000
<b>TOTAL PROJECT COSTS OF NEW TOWNSHIP BUILDING AND PUBLIC WORKS ADDITION AND RENOVATIONS</b>				\$ 52,158,142
<b>TOTAL PROJECT COSTS Presented to BOC on 2-14-2023.</b>				\$ 52,200,000

# UPPER DUBLIN TOWNSHIP – VALUE ENGINEERING



Value Engineering Study Summary of Estimated Costs/Savings				
Row #	VE Description	Estimated Savings from VE Ideas	Estimated Cost of Added Value Ideas	Estimated Value of Defined Alternates
1	Reduce the size of the New Township Administration and Police Facility by approximately 7,400 SF.	\$ 2,700,000		
2	Document an Add Alternate for two additional garage bays for the Public Works Garage Addition.			\$ 1,000,000
3	Remove mill & overlay of existing asphalt paving to remain from project scope. Mill & overlay will be performed by UDT Public Works.	\$ 173,500		
4	Construct large retaining wall with segmented block in lieu of cast-in-place concrete with masonry veneer.	\$ 339,100		
5	Delete connecting portion of Police Canopy.	\$ 73,800		
6	Provide a single-ply EPDM roof in lieu of a built-up roof for all of the New Township Building's low-sloped roof areas.	\$ 114,000		
7	Provide ground-source heat pump HVAC system with VAV's for new Township Building facility.		\$ 1,144,000	
8	Document a lightning protection system for the new Township Building as an add alternate.			\$ 203,400
9	Design emergency power generator system to allow for full-building emergency power coverage in lieu of partial-building coverage.		\$ 218,000	
10	Document alternates for photovoltaic systems to serve the New Township Administration and Police Facility.			\$ 1,275,200
11	Value of All Other Accepted VE Ideas that were Evaluated	\$ 760,050	\$ 404,175	\$ 93,925
12	<b>Total Estimated Values of All Accepted VE Ideas</b>	<b>\$ 4,160,450</b>	<b>\$ 1,766,175</b>	<b>\$ 2,572,525</b>
13	Value of All Rejected VE Ideas that were Evaluated	\$ 18,000	\$ 185,650	
14	<b>Total Estimated Values of All VE Ideas (Accepted and Rejected)</b>	<b>\$ 4,178,450</b>	<b>\$ 1,951,825</b>	<b>\$ 2,572,525</b>

# UPPER DUBLIN TOWNSHIP – ALTERNATES



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ALTERNATES					
ALT #	DESCRIPTION	APPLIES TO GC	APPLIES TO MC	APPLIES TO EC	APPLIES TO PC
1	Complete Work in accordance with the Alternate Bid/Early Completion Incentive Schedule as noted on Phasing Plans and described in the bid documents.	X	X	X	X
2	Provide (2) additional garage bays at Public Works Garage addition.	X	X	X	X
3	State the cost to perform all excavation as UNCLASSIFIED through hydraulic/mechanical means in lieu of CLASSIFIED as specified. Under this Alternate, the surplus soils and rock are to be disposed of legally by the contractor offsite or processed (equal to 2A Modified) for re-use as structural fill onsite.	X	X	X	X
4	Provide 18" depth over-excavation of all cuts in the building footprint and provide engineered structural fill, 2RC or 2A Modified stone in lieu of using onsite materials to a depth of 18" below the bottom of slab subgrade stone for the entire new building pad (cut & fill) and up to 5' outside the new building's exterior wall line. Under this Alternate, the resulting excess soils are to be disposed of legally by the contractor offsite.	X	X	X	X
5	Provide alternate stone veneer manufactured by XXXXX for new Township Building where indicated. This alternate includes a mockup and pricing must be held for 6 months from Notice to Proceed.	X			
6	Provide a single-ply EPDM roofing system in lieu of Base Bid TPO roofing system for all of the New Township Building's low-sloped roof areas.	X			
7	Provide a single-ply EPDM roofing system in lieu of Base Bid metal roofing system for all of the New Township Building's roof areas.	X			
8	Provide a fastened 25 kW PV System on meeting room roof and 225 kW on the new Township Building sloped roof where indicated.	X		X	
9	Provide a fastened 100 kW PV System on the Public Works Building addition. Under this Alternate the Bidder shall include the roof areas of the (2) additional garage bays as detailed in Alternate No. 2.	X		X	
10	Provide a 50 kW PV self ballasted system on low slope roof on new Police Building.	X		X	
11	Provide a 75 kW Solar Canopy System for the Police Secured Parking area.	X		X	
12	Delete the bird strike patterned glazing for all window and door locations where shown on the building elevations.	X			
13	Provide Lift and Gantry Crane in the Public Works Building as furnished and installed by Tool & Equipment Solutions.	X		X	
14	Provide quartz floor tile in upper and lower level lobbies and lobby stairs in lieu of porcelain tile.	X			
15	Provide a lightning protection system at New Township Building roof.			X	

# UPPER DUBLIN TOWNSHIP – ALTERNATES (continued)



ALT #	DESCRIPTION	APPLIES TO GC	APPLIES TO MC	APPLIES TO EC	APPLIES TO PC
16	Provide the full camera system as furnished and installed by Acteon.			X	
17	Provide the full card access system as furnished and installed by Acteon.	X		X	
18	Under this Alternate, the Bidder shall provide an ATC system with products manufactured by Schneider Electric (EcoStruxure) and installed by CM3 Building Solutions of Fort Washington, PA, in lieu of Contractors choice of Base Bid ATC system manufacturers listed in Section 230923 Direct Digital Controls for HVAC.		X		
19	Under this Alternate, the Bidder shall provide Energy Recovery Units as manufactured by Aaon equal to Base Bid units in lieu of the Contractors choice of Base Bid Energy Recovery Unit manufacturers listed in Section 237223 Packaged Air to Air Energy Recovery Units.		X		

- **Receive Bids – January 2024**
- **Bid Awards and Execute Construction Contracts – January/February 2024**
- **Pursue IRA Reimbursement – Ongoing**
- **Manage RACP Reimbursement – Ongoing**

# THANK YOU



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