

**UPPER DUBLIN TOWNSHIP
REPURPOSING 520 VIRGINIA DRIVE, UPPER DUBLIN PUBLIC LIBRARY**

**ESCO PROPOSALS AND BOARD OF COMMISSIONERS STATUS UPDATE
TUESDAY, JANUARY 8, 2019**



D'HUY Engineering, Inc.

2nd Floor Plan

UDPL

UPPER
DUBLIN
PUBLIC
LIBRARY

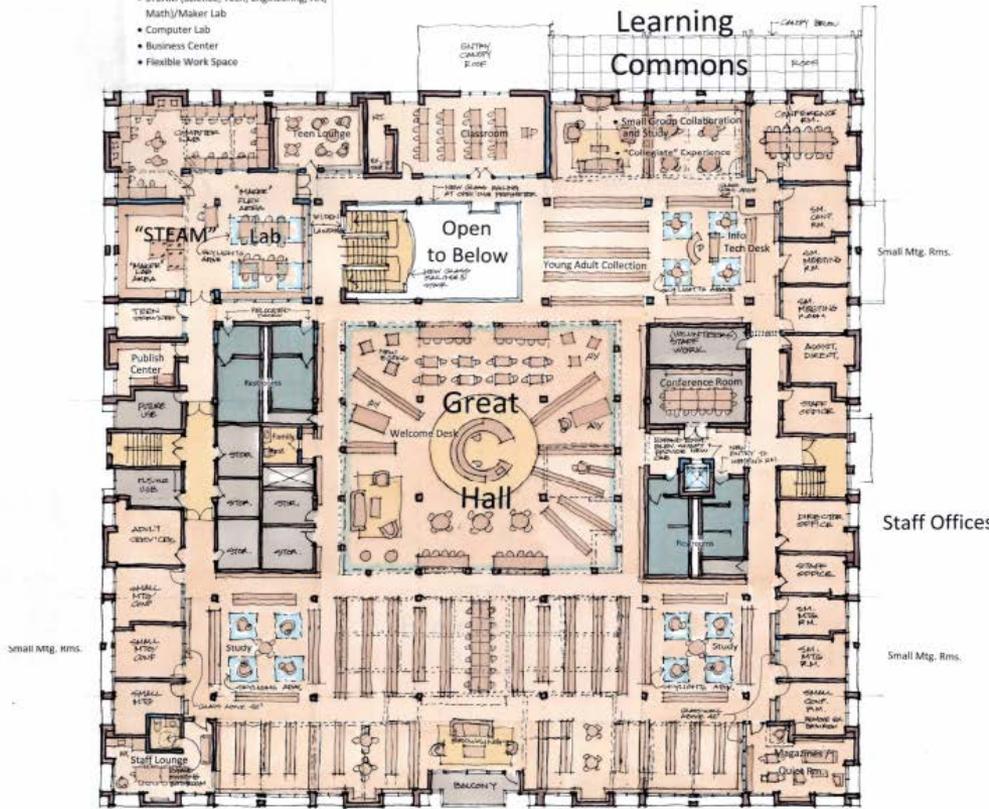
520 Virginia Drive

2
UPPER
LEVEL

Creation Suite

- STEAM (Science, Tech, Engineering, Art, Math)/Maker Lab
- Computer Lab
- Business Center
- Flexible Work Space

Learning Commons



Exploration Wing

- General Collection
- Browsing
- Reading / Study Areas
- Small Meeting Rooms



Project Schedule

Project Schedule																				
Project Milestones	Duration	2018							2019											
		June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
Schematic Design	2 months	█	█																	
Stakeholder Review	1 month			█																
Design Development	2 months				█	█	█													
GESA RFP Process	2 Months							█	█											
Consider GESA MEP Audit/Contract Approval	1 month									█	█									
GKO Bid Document Proposal Approval	1 month									█	█									
General Construction Bid Documents	3 month									█	█	█								
GC Contract Bidding	1 month												█							
GC Contract Approval	1 month													█						
ESCO Construction including GC	9 months												█	█	█	█	█	█	█	█

Revised January 8, 2019

KEY SCHEDULE DATES

RFP Response	January 7, 2019
Consider GESA MEP Audit/Contract Approval	February 12, 2019
GKO/DEI Contract Approval	February 12, 2019
General Construction Bid Documents (if required)	February - April 2019
General Construction Contract Bidding (if required)	May 2019
General Construction Contract Approval (if required)	June 2019
ESCO Construction including GC if feasible	April - December 2019

Summary of GESA Contract MEP systems - HVAC

- Remove all acoustic ceilings and grid throughout work areas. Support existing lighting to remain.
- Roof Repairs as required.
- Structural floor reinforcement of second floor.
- Replace existing HW and CW hydronic pumps; provide variable frequency drives.
- Re-condition existing air handling units: replace chilled water-cooling coils and drain pans, replace fan motors and bearings, replace dampers and actuators, replace hydronic valves and trim, replace automatic temperature controls, clean interior casings, provide variable frequency drives for each fan.
- Provide new VAV boxes equipped with hydronic heating coils. Modify existing VAV box air distribution to accommodate architectural alterations; replace existing grilles, registers and diffusers.
- Provide HW piping distribution throughout first and second floors to new VAV boxes. Modify existing HW fin-tube radiation to accommodate architectural alterations.
- Provide insulation repairs to existing hydronic piping and air distribution systems.
- Provide air duct cleaning to existing supply air and return air duct systems.
- Replace existing exhaust fans. Provide additional exhaust fans and ductwork to accommodate toilet rooms and kitchenette alterations including roof repairs.
- Replace all existing pneumatic temperature controls with a new building management and control system; provide electronic damper and valve actuators; provide operator work station, software licensing, and color graphics; provide controls commissioning.
- Provide testing and balancing for hydronic and airside equipment, piping, and ductwork systems.

Summary of Prime Contract #1 GESA Contractor - Continued MEP systems – Plumbing & Fire Protection

Plumbing

- Provide fixtures and plumbing for new toilet rooms depicted on the architectural plans.
- Replace fixtures and modify existing plumbing to accommodate ADA toilet room alterations.
- Provide fixtures and plumbing for new kitchenette sinks and vending areas depicted on the architectural plans.
- Modify existing hot water return piping to improve hot water delivery to existing toilet rooms and kitchenettes.
- Replace existing drinking fountains.
- Existing Restrooms
 - Renovate existing restrooms to be fully accessible
 - Remove existing toilets and install new fixtures in code-compliant configurations
 - Supplement existing grab bars as required to yield code compliant installations
 - Repair tile finishes where disturbed by demolition and construction activities
- Replace existing sump pump.

Fire Protection

- Remove obsolete chemical or inert gas fire suppression systems. Provide wet pipe sprinkler system coverage in former data room on 1st floor and in rear Auditorium control area.
- Relocate and replace existing sprinkler heads throughout building to accommodate architectural ceiling alterations.

Summary of Prime Contract #1 GESA Contractor - Continued MEP systems – Electrical

- Clean, inspect, and service main service gear; add additional breakers; provide new transformer.
- Replace the existing emergency generator; provide new transfer switches; replace existing underground conduits from generator to building.
- Modify existing electrical distribution to accommodate Architectural alterations and HVAC, Plumbing, and Elevator equipment alterations.
- Provide additional 120V convenience receptacles and data, and telecom receptacles to accommodate architectural floor plan and furniture plan alterations.
- Replace interior lighting and controls throughout (except auditorium and with exception to some existing office areas).
- Modify the existing fire alarm system to accommodate architectural modifications.
- Provide data network and telephone wiring systems.
- Provide intrusion detection and video surveillance system.
- Provide building access control system
- Provide space/spare capacity provisions for future
- Existing Elevator Modernization - renovate and upgrade existing elevator equipment.
 - Install a new cab,
 - Install new controls

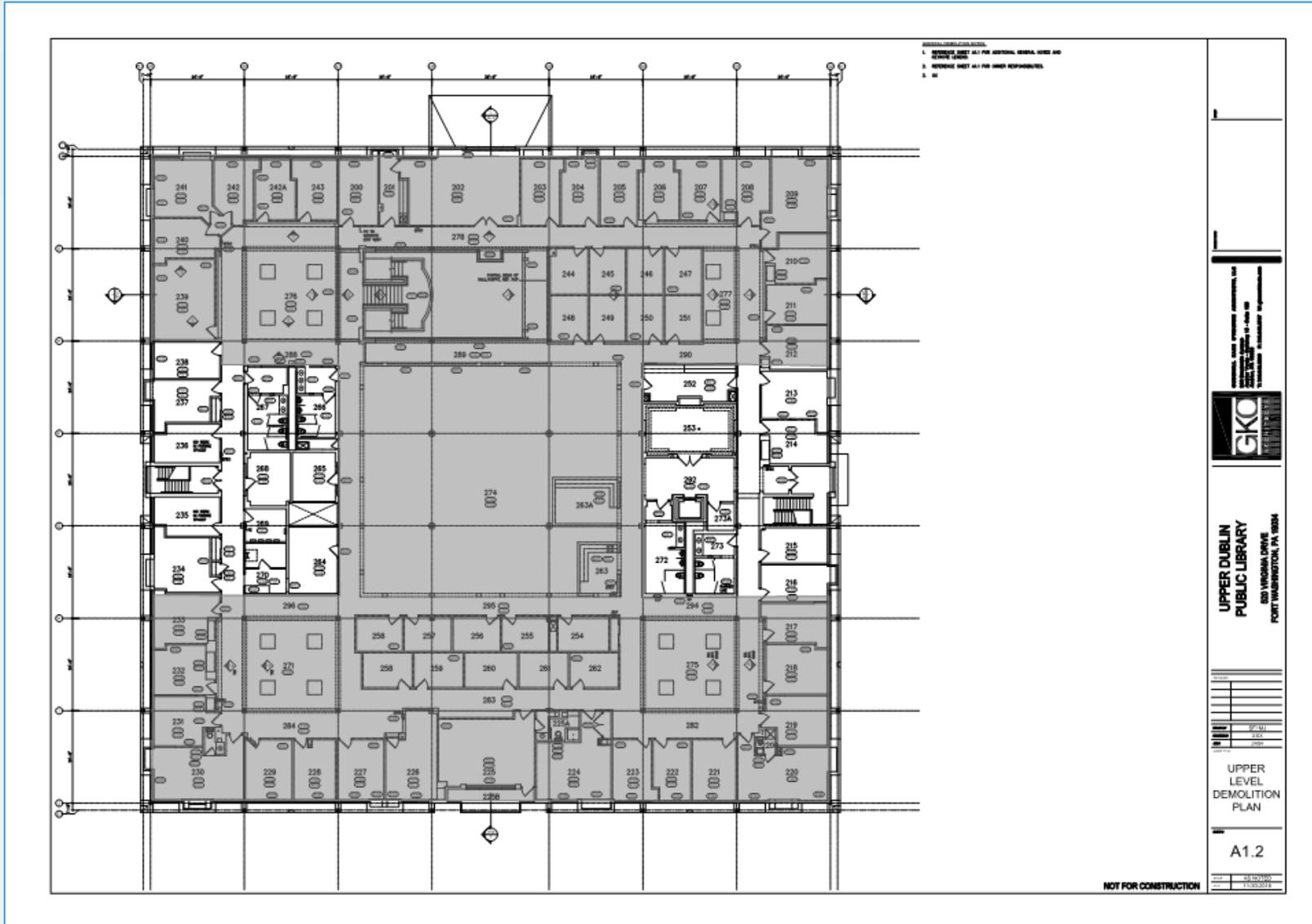
Summary of General Construction Scope

Alternate work by Prime Contract #1

General Construction - Primary Renovations required for adaptation to a Public Library:

- Selective demolition of existing partitions
- Construction of new partitions
- Fit-out of primary spaces
- Remove existing solid guardrail at the two-story lobby and replace with a glass and steel guardrail system
- Install sections of interior windows to allow staff to monitor Library operations and to provide natural light to interior spaces
- The Public areas and the Library area will receive new finishes including:
 - Metal stud / drywall partitions with painted finishes
 - Wood paneled finishes
 - New acoustic and drywall ceilings
 - New finish floor materials
 - New solid core wood doors, and related new hardware
 - New casework and countertops
- New interior directional signage/raised metal letters/plaque
- New barrier-free automatic door operators at main entrance
- Provide a vehicular drive-up book drop on the North side of the building
- Add family type unisex toilet rooms to supplement the existing public rest-rooms
- Equip restrooms with baby changing stations & lactation area

Scope of Work – 2nd Floor Areas



Draft Concept Budget

Design Draft Budget January 7, 2019 Scope Included in Design Development Plans Received November 30, 2018

Renovation Package	Priority Level	Size of Renovation Area (SF)	Cost per Square Foot	Competitive Bid			Energy Contract			Total Estimated Package Cost			Site Work Material and Equip. Costs
				Estimated Cost	Running Total		Estimated Cost	Running Total		Estimated Cost	Running Total		
MEP Improvements	1	57,200	\$ 73.19	\$ 650,700	\$ 650,700	\$ 650,700	\$ 3,535,845	\$ 3,535,845	\$ 3,535,845	\$ 4,186,545	\$ 4,186,545	\$ 4,186,545	
Primary Renovations Required for Library Operations, No MEP Work	2	36,100	\$ 70.85	\$ 2,557,686	\$ 3,208,386	\$ 3,208,386		\$ 3,535,845		\$ 2,557,686	\$ 6,744,231	\$ 6,744,231	
Structural Improvements	3			\$ 79,500	\$ 3,287,886	\$ 3,287,886		\$ 3,535,845		\$ 79,500	\$ 6,823,731	\$ 6,823,731	
Boiler Replacement	4				\$ 3,287,886	\$ 3,287,886	\$ 460,000	\$ 3,995,845	\$ 3,995,845	\$ 460,000	\$ 7,283,731	\$ 7,283,731	
Roof Repairs	5			\$ 175,000	\$ 3,462,886	\$ 3,462,886		\$ 3,995,845	\$ 3,995,845	\$ 175,000	\$ 7,458,731	\$ 7,458,731	
Parking Lot Improvements Phase 1	6			\$ 265,571	\$ 3,728,457			\$ 3,995,845		\$ 265,571	\$ 7,724,302		\$ 126,316
Improvements to Existing Elevator	7			\$ 200,000	\$ 3,928,457	\$ 3,662,886		\$ 3,995,845	\$ 3,995,845	\$ 200,000	\$ 7,924,302	\$ 7,658,731	
Small Meeting/Conference Rooms Renovations	8	3,520	\$ 39.79	\$ 100,625	\$ 4,029,082	\$ 3,763,511	\$ 39,420	\$ 4,035,265	\$ 4,035,265	\$ 140,045	\$ 8,064,347	\$ 7,798,776	
Staff Offices and Work Spaces	9	2,070	\$ 33.24	\$ 45,645	\$ 4,074,727	\$ 3,809,156	\$ 23,165	\$ 4,058,430	\$ 4,058,430	\$ 68,810	\$ 8,133,157	\$ 7,867,586	
Secondary Stair Tower Renovations	10	840	\$ 18.19	\$ 12,345	\$ 4,087,072	\$ 3,821,501	\$ 2,935	\$ 4,061,365	\$ 4,061,365	\$ 15,280	\$ 8,148,437	\$ 7,882,866	
Storage Room Renovations	11	630	\$ 14.51	\$ 6,950	\$ 4,094,022	\$ 3,828,451	\$ 2,190	\$ 4,063,555	\$ 4,063,555	\$ 9,140	\$ 8,157,577	\$ 7,892,006	
Remaining Master Plan Parking Lot Improvements	12			\$ 675,619	\$ 4,769,641		\$ 174,650	\$ 4,238,205		\$ 850,269	\$ 9,007,846		\$ 335,583
Entrance Canopy	13			\$ 200,000	\$ 4,969,641			\$ 4,238,205		\$ 200,000	\$ 9,207,846		
Café and Vending/Food Prep Renovations	14	1,800	\$ 198.84	\$ 315,590	\$ 5,285,231		\$ 42,325	\$ 4,280,530		\$ 357,915	\$ 9,565,761		
Auditorium and Program/Reception Space Renovations	15	7,030	\$ 48.33	\$ 136,356	\$ 5,421,587		\$ 203,380	\$ 4,483,910		\$ 339,736	\$ 9,905,497		
Future Use Space Renovations	16	4,200	\$ 47.32	\$ 105,225	\$ 5,526,812		\$ 93,510	\$ 4,577,420		\$ 198,735	\$ 10,104,232		
Furnishings and Technology					\$ 5,526,812			\$ 4,577,420		\$ 1,500,000	\$ 11,604,232		

Does not include \$1,500,000 for Furnishings & Technology

Plus soft costs \$1,966,170 = \$9,858,176

Keystone Grant Awarded -\$750,000

Summary of MEP & GC Costs

UPPER DUBLIN PUBLIC LIBRARY GUARANTEED ENERGY SAVINGS PROJECT
 DEI PROJECT No. 711002
 ESCO PROPOSAL SUMMARY 1/8/2019

Scope Category	Budget Cost	CM3 Proposal Cost	Cost Difference	Comments
<ul style="list-style-type: none"> • Mechanical Equipment • Boiler • Plumbing Upgrades • Fire Protection Upgrades • Lighting Upgrades • Electrical Upgrades • Emergency Generator • Elevator Modernization • Security & Telecommunications • Structural Improvements & Roof • Chiller 				
BASE MEP TOTAL	\$4,063,555	\$5,292,198	-\$1,228,643	
Deduct Auditorium Upgrade		-\$75,632		Accept deduct to upgrade lighting in Auditorium
Deduct - Reuse existing ductwork		-\$264,000		Accept deduct to reuse existing ductwork after VAV units. Deduct to delete heating coils in VAV units (\$468,000) not accepted.
Lighting Package Deduct 50%		-\$299,838		Accept deduct of partial lighting fixtures
Elevator Modernization		-\$67,320		Deduct to reuse existing elevator piston accepted.
Subtotal	\$4,063,555	\$4,585,408	-\$521,853	
GC Scope				
Selective Demolition				
General Conditions				
Interior Finishes, walls, ceilings				
Base GC TOTAL:	\$3,828,451	\$3,090,169	\$738,282	
Deduct for different interior finishes		-\$171,468		Accept deduct to change interior finishes.
Deduct to utilize different ceiling tiles		-\$95,040		Accept deduct to utilize different ceiling tiles.
Deduct exterior canopy		-\$63,621		
GC Subtotal	\$3,828,451	\$2,760,040	\$1,068,411	
MEP & GC Total Base	\$7,892,006	\$7,345,448	\$546,558	
Soft Cost Adjustment	\$1,016,905	\$561,602		Includes limited fees and contingency in ESCO number
CM & Arch. Design Fees	\$949,265	\$949,265		Fees to date and to finish
Contingency for Scope & Unforeseen		\$750,000		Consider boiler replacement, light fixtures and finishes
TOTAL	\$9,858,176	\$9,606,315	\$251,861	
Keystone Grant Awarded		-\$750,000		Verify ESCO compliance with Grant
	\$9,858,176	\$8,856,315		
Items not in Contract				
Furnishings & Technology	\$1,500,000	\$1,500,000		

First Year Annual Service Fees

First Year Annual Service Fees	Fees (1) Dollar (\$) Value
Measurement and Verification	\$ 2,000
ENERGY STAR Services (optional)	\$ 1,500
Post Construction Services	
Maintenance & Service of Controls Systems after 1st Year (per year)	\$ 9,360
Maintenance & Service of Central Plant Systems after 1st Year (per year)	\$ 4,160
Maintenance & Service of All Terminal Equipment after 1st Year (per year)	\$ 6,240
Performance Monitoring after 1st Year (per year)	\$ 2,000
On-going Training Services after 1st Year (per year)	As Needed
Verification Reports	\$ 500
TOTAL FIRST YEAR ANNUAL SERVICES	\$ 22,260

Next Steps

Next steps in project:

- Final review of received Proposals and Value Engineering options
- Consider approval of CM-3 Proposal for Audit/Due Diligence – February 12, 2019
- Assemble and award Audit to CM-3
- Confirm compliance with Keystone Grant for executing work through ESCO
- Execute GKO & Design Team CD Contract
- Execute DEI Contract
- Obtain bids for General Construction work if required
- Integrate Energy Savings Company & General Construction work on site



Questions?

Thank you for attending.