RANDALL LIBRARY PRELIMINARY DESIGN SUMMARY TOWN MEETING - 7/12/2023 CONSTRUCTION DOCUMENT WORKSHOP 6.1 STOW, MA



designLAB architects G2 G2 COLLABORATIVE LANDSCAPE ARCHITECTURE

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design**LAB** architects Team: Ben Youtz, Partner Andrew Brookes, Architect Audrey Scanlon, Designer

G2 Collaborative Team: Gigi Saltonstall Alison Goyer **Consultants:** Fitzmeyer + Tocci Associates RGE Structural Engineers Nitsch Engineers

designLAB architects

Today's Agenda

Introduction (10 min) - Review Work Plan + Process Updates

Value Management Strategies (30 min)

Plan Updates (15 min)

Discussion + Next Steps (15 min)

SCHEDULE



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ZBA Hearing



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PRIMARY COST DRIVERS FROM INITIAL ESTIMATE

COST DRIVERS:

- Additional and Extended Escalation Cost
 - Specialized Stretch Code Impact (Electrified HVAC System)
 - Hazardous Material Remediation
 - Material Cost Increase
 - Availability of Labor
- Freight and Storage Costs for Long Lead Times
 - Less Competition in Bidding Process
- Lack of Guaranteed Pricing and Supply Chain

Issues

 Increase in Building Size (approx. 500SF)



VALUE MANAGEMENT STRATEGIES

RECOMMENDED

- Change from Custom HVAC system
- Remove EV Charging Station
- Keep Light Fixtures in Historic Rooms
- Substitute Underpinning for Grade Beams
- Prefabricated Stone Site Walls Instead of Brick
- Reduce Landscape Plantings and Hardscape
- Reduce Impervious Areas
- Simplify/Reduce Finishes
- Reduce Refinishing of Existing Woodwork
- Change to Demountable Storefront System
- Change to Metal Perimeter Shelving
- Hydraulic Elevator Instead of Traction
- Remove Book Security Gates
- Reduce Double Height Spaces
- Reduce Window Shades
- Alt Cladding at Comm Room Volume
- Reduced Height of Comm Room Volume
- Reduced Footprint of Comm Room
- Simplify Roof Geometry from steel to wood
- Remove Lower Level Breakroom Bump Out

TARGET REDUCTION: \$802.6K - \$855.9K

IF NECESSARY

- Remove Septic Tank Increase From Scope
- Remove Exterior Stair/Ramp to Original Door
- Reduce Nanawall by 50%
- Reuse Metal Perimeter Shelving

11

- Remove Interior Ramp
- Alt Cladding at Front Volume

INTERIOR PLAN STRATEGIES

- Simplify finishes
- Reduced existing woodwork refinishing
- Demountable storefront system
- Metal perimeter shelving
- Hydraulic Elevator
- Remove book security gate
- Reduce window shades



\$298.4k - \$314.1k total

REDUCED FOOTPRINT PLAN STRATEGIES



- Remove breakroom bump-out
- Reduce size of community room volume
- Reduce double height

\$100.1k - \$106.2k total

ELEVATOR OPTIONS

HYDRAULIC

- Machine Room ~ 5' 9" x 7' 4"
 - Little Louder
 - Slower
 - Oil separator
 - Saves \$40k

TRACTION

- Machine Room ~ 6' x 6'
 - Little Quieter
 - Faster
 - More Expensive

REDUCE LANDSCAPING

- Remove tree pendant lights
- Replace concrete pavers with brick pavers
- Reduce size of plantings
- Use prefabricated stone site walls

\$110.2k - \$116k total



EXTERIOR STRATEGIES



- Alt Cladding Community Room Volume (clapboard)
- Reduce Community Room Volume height
- Simplify roof geometry from steel to wood

\$83.5k - \$87.9k total

SOUTHWEST APPROACH



MECHANICAL SYSTEM OPTIONS WITH COST SAVING

OFF THE SHELF AHU

- Increase in elec costs
- Zone control ventilation
- Meets stretch code Does not meet enhanced code
- Life expectancy 20-25 years
 - Increased size of unit

\$47.5k - \$50k savings



VRF HEAT PUMP SYSTEM WITH MAKEUP AIR UNIT

- No zone control ventilation
- Meets stretch code minimum
 - Life expectancy 15 years
- ERV is required for Ventilation air
 Code minimum outside air
 - Code minimum outside air

\$118.8k - \$125k savings



TRADITIONAL

- Limited zone control ventilation - Doesn't meet stretch code
- Life expectancy 15-20 years
- Two units required one zone per floor

\$285k - \$300k savings



MECHANICAL SYSTEM OPTIONS WITH COST SAVING

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VALUE MANAGEMENT STRATEGIES

BUILDING SYSTEMS

1.0	Change from the Custom HVAC system - Low End	(47,500.0)	(50,000.0)
1.1	Change from the Custom HVAC system - Med	(118,750.0)	(125,000.0)
1.2	Change from the Custom HVAC system - High End	(285,000.0)	(300,000.0)
2.0	Remove EV Charging Station	(15,960.0)	(16,800.0)
3.0	Lighting reductions - Low End	(57,000.0)	(60,000.0)
3.1	Lighting reductions - High End	(75,000.0)	(90,000.0)
4.0	Septic tank size increase (remove from scope)	(33,250.0)	(35,000.0)
6.0	Substitute underpinning for grade beams	TBD	TBD

LANDSCAPE/SITE

7.0	Prefabricated stone site walls instead of Brick	(48,450.0)	(51,000.0)
8.0	Reduced Landscaping (Planting + Hardscaping)	(61,750.0)	(65,000.0)
	Reduce impervious area to eliminate the need for stormwater		
9.0	retention.	TBD	TBD
10.0	Remove exterior stair/ramp to original door	(114,000.0)	(120,000.0)

INTERIOR

		A. 127	
11.0	Reduce Nano Wall (50%)	(5,700.0)	(6,000.0)
12.0	Simplify/Reduce New Finishes	(35,625.0)	(37,500.0)
13.0	Reduced Refinishing of Exist. Woodwork	(42,750.0)	(45,000.0)
14.0	Change to demountable storefront system	(14,820.0)	(15,600.0)
15.0	Change to metal perimeter library shelving - Low End	(118,750.0)	(125,000.0)
16.1	Reuse metal perimeter library shelving - High End	(142,500.0)	(150,000.0)
17.0	Elevator change to Hydraulic	(38,950.0)	(41,000.0)
18.0	Remove Book Security Gates	(19,000.0)	(20,000.0)
19.0	Remove Interior Ramp	(24,700.0)	(26,000.0)
20.0	Reduce Double Height Spaces by 25%	(11,875.0)	(12,500.0)
21.0	Reduce amount of window shades	(28,500.0)	(30,000.0)
		48 40	

EXTERIOR

22.0	Alt. Cladding Community Room volume	(21,850.0)	(23,000.0)
23.0	Alt. Cladding on front volume	(26,600.0)	(28,000.0)
24.0	Reduce height of Community Room	(28,500.0)	(30,000.0)
25.0	Reduce size of Community Room	(41,515.0)	(43,700.0)
26.0	Simplify Roof Geometry from steel to wood	(33,107.5)	(34,850.0)
27.0	Remove LL Break room Bump-Out	(47,500.0)	(50,000.0)

20

VALUE MANAGEMENT STRATEGIES - RECOMMENDED

BUILDING SYSTEMS

1.0	Change from the Custom HVAC system - Low End	(47,500.0)	(50,000.0)
1.1	Change from the Custom HVAC system - Med	(118,750.0)	(125,000.0)
1.2	Change from the Custom HVAC system - High End	(285,000.0)	(300,000.0)
2.0	Remove EV Charging Station	(15,960.0)	(16,800.0)
3.0	Lighting reductions - Low End	(57,000.0)	(60,000.0)
3.1	Lighting reductions - High End	(75,000.0)	(90,000.0)
4.0	Septic tank size increase (remove from scope)	(33,250.0)	(35,000.0)
6.0	Substitute underpinning for grade beams	TBD	TBD

\$231.8K

LANDSCAPE/SITE

			\$116K
10.0	Remove exterior stair/ramp to original door	(114,000.0)	(120,000.0)
9.0	Reduce impervious area to eliminate the need for stormwater retention.	TBD	TBD
8.0	Reduced Landscaping (Planting + Hardscaping)	(61,750.0)	(65,000.0)
7.0	Prefabricated stone site walls instead of Brick	(48,450.0)	(51,000.0)

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		1.	\$326.6K

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27.0	Remove LL Break room Bump-Out	(47,500.0)	(50,000.0)

\$181.5K

TARGET REDUCTION: \$802.6K - \$855.9K

DD ESTIMATE SUMMARY WITH VALUE MANAGEMENT



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UPDATED PLAN - LOWER LEVEL



UPDATED PLAN - UPPER LEVEL



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End

SOUTHWEST APPROACH



SOUTHEAST APPROACH



PROPOSED EXTERIOR COMPOSITION







35

UPDATED PLAN - LOWER LEVEL



UPDATED PLAN - UPPER LEVEL



PREVIOUS VALUE MANAGEMENT STRATEGIES

