# RANDALL LIBRARY PRELIMINARY DESIGN SUMMARY TOWN MEETING - 5/24/2023 DESIGN DEVELOPMENT WORKSHOP 5 STOW, MA



#### designLAB architects G2 G2 COLLABORATIVE LANDSCAPE ARCHITECTURE

# RANDALL LIBRARY PRELIMINARY DESIGN SUMMARY TOWN MEETING - 5/24/2023 DESIGN DEVELOPMENT WORKSHOP 5 STOW, MA

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 **G2** COLLABORATIVE LANDSCAPE ARCHITECTURE

# Today's Agenda

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

Plan Update Overview (20 min)

Staff Feedback + Program ReviewUpdated Plan Review

# Building System Update (15 min)

- Mechanical System Update
- Fire Protection System Update

# Exterior Building (45 min)

- Review Previous Schemes + Feedback
- Review Proposed Options
  - **Review Recommendations**

# **Discussion + Next Steps (15 min)**

#### SCHEDULE



#### SCHEDULE

-	 		 					<u>50% D</u> D	<u>S</u> et					- -  -
		Ξ.	Design Development								3 Wee	ek Estimate		
			• WS We 630	<b>3</b> d., 4/12 Opm		• WS We 6.3	; <b>4</b> ● d., 5/3 0pm	WS 4.1 Wed., 5/10 6.30pm	0	<b>) WS 5</b> Wed., 5/24 6.30pm			C	<b>) WS 6</b> Wed., 6/28 6pm
_	 		 ● Bolton Visit ● Town Depart. Mtgs. ● Staff Interviews ● Br <u>icky</u> ar <u>d</u> Visit											



# Today's Agenda

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

Plan Update Overview (20 min)
Staff Feedback + Program Review
Updated Plan Review

# **Building System Update (15 min)**

- Mechanical System Update
- Fire Protection System Update

## Exterior Building (45 min)

- Review Previous Schemes + Feedback
- Review Proposed Options
- **Review Recommendations**

# **Discussion + Next Steps (15 min)**



#### **PREVIOUS PLAN - LOWER LEVEL**



#### LOWER LEVEL STAFF FEEDBACK

- Work room not large enough to accommodate all processing and storage:
  - Holds
  - Processing
  - 2 Desks
  - Office Supplies
  - Up to 4 Book Carts
  - Library of Things (small items storage)
  - Empty Bins

#### • More storage is required overall

#### • Teen

- More Visibility
- Additional Seating For Video Games
- YA Can Bleed to Collections

#### Meeting Room

- Consider only 2 small rooms
- Potential quiet booth in FFE

#### Community Room

- Need tables (flexible)

#### **PREVIOUS PLAN - UPPER LEVEL**



#### **UPPER LEVEL STAFF FEEDBACK**

- Break room not large enough for
  - Refrigerator
  - Eating table
  - Soft seating
  - Personal item storage
- Quiet Reading
  - Tables are too large
  - More soft seating

#### • Childrens

- Office/storage to be determined. Can accommodate both.
- Program space needs to accommodate up to 18
- Need space for soft seating
- Accommodate games, puzzles, backpacks, etc storage
- 4 computers

- Office
  - Not large enough

#### **UPDATED PLAN - LOWER LEVEL**



# LOWER LEVEL PLAN (ADDITION)

- Workroom and Circulation desk grew to accommodate storage and program needs
- Vestibule Adjusted
- Community Room
   entrance moved



#### **BROWSING + ARRIVAL**



#### **COMMUNITY LIVING ROOM**





#### **COMMUNITY ROOM**



#### **CIRCULATION DESK AREA**



### CIRCULATION DESK AREA



#### LOWER LEVEL PLAN (PROPOSED)

- Breakroom moved to Collections space
- Replaced a Meeting Room with a Storage Room in Collections



#### **MEETING ROOM SUMMARY**

- 2 Small Meeting Rooms for general use, tutors and clubs to meet simultaneously
  - $\circ$  5-7 People
  - Knitting Club, Lego Club, Book Club, Puzzle Club, etc.
- 1 Large Flexible space for up to 30-40
  - $\circ\,$  Ghost, Trivia, Cookbook Club, etc.



#### **COLLECTION SUMMARY**

- 30,000 Volumes
- 2,000 Video
- Library of Things
  - $\circ\,$  Requires storage and display
- Will remain approximately the same size (new acquisitions / regular purging)



#### **TEEN SPACE SUMMARY**

- Acoustic Separation
- Visual Supervision
- 2:00-5:00, Arriving from middle school. May enter through upper level.
- Programs
  - Study
  - $\circ\,$  Hangout / Eat
  - $\circ\,$  Video games

- Two spaces:
  - Quiet space
  - Activity Space





**1970'S RENOVATION - UPPER LEVEL** 



#### **UPDATED PLAN - UPPER LEVEL**



- Widened Entrance to Children's
- Children Librarian's office to also function as prep/storage space
- Fit roughly 20-26 children in program space



#### CIRCULATION GASKET -UPPER LEVEL



- Small storytime
- Prep staging and storage
- Table/craft space
- No separate program space
- No office required (initially)









#### UPPER LEVEL PLAN (PROPOSED)

- Expanded Library Director's Office
- Added a Restroom
- Opened the connection between the addition and existing spaces
- Moved more of the collection to the Quiet Reading and Quiet Tech Rooms



#### **Historic Spaces**

- Not adjacent to children's or YA
- Combine with reference
- Adjacent to computers
- Special Collections
- Audio
- Periodicals



#### DISCUSSION





# Today's Agenda

# Introduction (10 min)

- Review Work Plan + Process Updates

# Plan Update Overview (20 min)

Staff Feedback + Program ReviewUpdated Plan Review

# **Building System Update (15 min)**

- Mechanical System Update
- Fire Protection System Update

# Exterior Building (45 min)

- Review Previous Schemes + Feedback
- Review Proposed Options
- **Review Recommendations**

# **Discussion + Next Steps (15 min)**
#### FIRE PROTECTION SYSTEM OPTIONS

#### Option 1: Traditional FP System Description (Reference)

The traditional FP system (also called Reference for the intent of this comparison) consists of an up to 30,000 gal tank for water supply to be placed on the property or, most likely, on the adjacent existing Fire Station site. The exterior tank would have a diesel fire pump head house (standalone structure) on top of the exterior tank with a discharge running back into the library basement.

#### Option 2: Water Mist System

The Water Mist System foresees a water storage tank and a battery of gas cylinders that drive the system's pump. The water supply for the water mist system is approx. 1,200 gallons, equivalent to a 5' diameter X 8' tall tank. A preliminary space planning exercise to accommodate this system suggests an approx. 10'x15' room will be required.

**Disclaimers:** 

- The feasibility of a water mist system still must be verified in terms of space requirements in the building.
- Neither solution is taking into consideration (yet) the protection solution of the open ceilings areas.

#### **FIRE PROTECTION SYSTEM OPTIONS**

CRITERIA	TRADITIONAL FP SYSTEM WITH TANKS (Reference)	WATER MIST SYSTEM
Capital expenditure	Anticipated indicative costs : - Tank system:\$500k (estimate) - Sprinkler: \$100k (estimate) - Special site works (tanks): TBD	Anticipated indicative costs: less than reference
Maintenance costs	Standard wet system plus yearly tank inspection and weekly pump test	Similar to standard wet system
Ease of maintenance	Undertaken by a third party	Undertaken by a third party
Space needs in the building	Reference	Higher than Reference. Approx. 10'x15' room
Space needs outside the building	Higher than the water mist (out of Library property)	None
Risk of impacts on scheduled timeline	High (third party property, soil related issues)	None
Permits	Same	Same
Water consumption	Reference	Lower than Reference
Energy consumption (in addition to controls)	Diesel fired pumps, electric resistance heaters for the tanks	None (high pressure gas cylinders)
System complexity	High (external tank and pump system)	Moderate
Life expectancy	50 years (pump and tank maintenance)	100 years (stainless pipe, just needs cylinders replacements)
Impact on book collections in case of accidental discharge	Water damage if an accidental discharge	No water damage if an accidental discharge
Long term solution for other similar buildings of the Town	Not with a 30,000 gal tank	Can be replicated to other buildings

#### FIRE PROTECTION SYSTEM OPTIONS

#### Option 1: Traditional FP System Description (Reference)

The traditional FP system (also called Reference for the intent of this comparison) consists of an up to 30,000 gal tank for water supply to be placed on the property or, most likely, on the adjacent existing Fire Station site. The exterior tank would have a diesel fire pump head house (standalone structure) on top of the exterior tank with a discharge running back into the library basement.

#### Recommendation

#### Option 2: Water Mist System

The Water Mist System foresees a water storage tank and a battery of gas cylinders that drive the system's pump. The water supply for the water mist system is approx. 1,200 gallons, equivalent to a 5' diameter X 8' tall tank. A preliminary space planning exercise to accommodate this system suggests an approx. 10'x15' room will be required.

#### **Disclaimers:**

- The feasibility of a water mist system still must be verified in terms of space requirements in the building.
- Neither solution is taking into consideration (yet) the protection solution of the open ceilings areas.

#### **MECHANICAL SYSTEM OPTIONS**

#### **Mechanical System Summary:**

The HVAC solution proposed for the building is a highly efficient and fully electric solution. This system will be running independently for the majority of the year. A boiler backup system is required for coldest days (outside air temperature lower than 20F). There are (2) options for this backup system:

Option 1: Natural Gas Fired Boilers (Reference)

500 MBH Capacity

Option 2: Electric Boilers

200 kW Capacity

**Disclaimers:** 

- The feasibility of electric back-up boilers still has to be verified in terms of additional electrical service required from the utility company.

#### **MECHANICAL SYSTEM OPTIONS**

CRITERIA	NATURAL GAS FIRED BOILERS	ELECTRIC BOILERS
Capital expenditure	\$40,0000	TBD Above Natural Gas Boilers
Maintenance costs	Yearly service \$200 - \$300	Yearly service \$200 - \$300
Possibility of receiving incentives (amounts unknown)	No	Yes
Space need in the building	ELEC room is the same size for both options	ELEC room is the same size for both options
Electric service upgrade (existing 400A)	600A (800A Distribution board)	1000A (1200A Distribution board)
Equipment efficiency	90-95%	95-99%
Reliability	Very good	Very good
Life expectancy	20- 25 years	15-20 years
Possibility of converting into electric system after life ends	Yes (Provided power is available)	Not Applicable
Ability to heat the building in case of black out	A small generator could provide backup power to start the boilers	No backup power source. A large generator and complicated power connections are required

#### **MECHANICAL SYSTEM OPTIONS**

#### **Mechanical System Summary:**

The HVAC solution proposed for the building is a highly efficient and fully electric solution. This system will be running independently for the majority of the year. A boiler backup system is required for coldest days (outside air temperature lower than 20F). There are (2) options for this backup system:

#### Recommendation

Option 1: Natural Gas Fired Boilers (Reference)

500 MBH Capacity

Option 2: Electric Boilers

200 kW Capacity

Disclaimers:

- The feasibility of electric back-up boilers still has to be verified in terms of additional electrical service required from the utility company.

#### **BUILDING SYSTEM RECOMMENDATIONS**

#### Mechanical System

#### Summary:

The HVAC solution proposed for the building is a highly efficient and fully electric solution. This system will be running independently for the majority of the year. A boiler backup system is required for coldest days (outside air temperature lower than 20F).

#### Recommendation

Option 1: Natural Gas Fired Boilers (Reference)

500 MBH Capacity

**Fire Protection System** 

#### Recommendation

Option 2: Water Mist System

The Water Mist System foresees a water storage tank and a battery of gas cylinders that drive the system's pump. The water supply for the water mist system is approx. 1,200 gallons, equivalent to a 5' diameter X 8' tall tank. A preliminary space planning exercise to accommodate this system suggests an approx. 10'x15' room will be required.

## Today's Agenda

#### Introduction (10 min)

- Review Work Plan + Process Updates

#### Plan Update Overview (20 min)

Staff Feedback + Program ReviewUpdated Plan Review

#### **Building System Update (15 min)**

- Mechanical System Update
- Fire Protection System Update

#### Exterior Building (45 min)

- Review Previous Schemes + Feedback
- Review Proposed Options
- **Review Recommendations**

### Discussion + Next Steps (15 min)



#### HISTORIC CONTEXT RANDALL COMPOSITION















#### **PREVIOUS FACADE STUDIES - FEEDBACK SUMMARY**

- GENERAL CONSENSUS / PREFERENCE TO NOT HAVE TALL / DOUBLE-HEIGHT WINDOWS AT CORNER
- CONSISTENTLY MIXED FEEDBACK ON 'CAP' SHAPE, 'BASE' HEIGHT AND MATERIAL TYPE



#### **PREVIOUS FACADE STUDIES - FEEDBACK SUMMARY**



#### **BUILDING COMPOSITION INSPIRATION**



#### **BUILDING COMPOSITION INSPIRATION**



#### **MATERIAL PALETTE**











#### **EXISTING BUILDING DETAIL**



#### **BOLTON BUILDING DETAIL**



#### **EXTERIOR MATERIAL COSTS**



#### **RECOMMENDED PALETTE**



#### RECOMMENDED PALETTE -POTENTIAL MASONRY OPTIONS









#### RECOMMENDED PALETTE -POTENTIAL MASONRY DETAILING



#### RECOMMENDED PALETTE -POTENTIAL MASONRY DETAILING















#### **STRATEGY 1: 1 DORMER LOW BASE**



#### **STRATEGY 1: 1 DORMER LOW BASE**





62





#### **STRATEGY 1: 1 DORMER LOW BASE**





















#### **STRATEGY 3: 2 DORMERS NO BASE**



#### **STRATEGY 3: 2 DORMERS NO BASE**













# **STRATEGY 3: 2 DORMERS NO BASE** Α Β



#### **STRATEGY 3: 2 DORMERS NO BASE**


# **EXTERIOR PALETTE COMPOSITIONS**

STRATEGY 1: 1 DORMER LOW BASE



**STRATEGY 2: 2 DORMERS HIGH BASE** 



**STRATEGY 3: 2 DORMERS NO BASE** 



# **RECOMMENDED EXTERIOR PALETTE COMPOSITIONS**

**STRATEGY 1: 1 DORMER LOW BASE** 



**STRATEGY 2: 2 DORMERS HIGH BASE** 



**STRATEGY 3: 2 DORMERS NO BASE** 



### **RECOMMENDED EXTERIOR PALETTE COMPOSITIONS**

#### **STRATEGY 3: 2 DORMERS NO BASE**













# POTENTIAL EXTERIOR PALETTE COMPOSITIONS



# **RECOMMENDED OPTION**



# Today's Agenda

# Introduction (10 min)

- Review Work Plan + Process Updates

# Plan Update Overview (20 min)

Staff Feedback + Program ReviewUpdated Plan Review

# **Building System Update (15 min)**

- Mechanical System Update
- Fire Protection System Update

# Exterior Building (45 min)

- Review Previous Schemes + Feedback
- Review Proposed Options
- **Review Recommendations**

# Discussion + Next Steps (15 min)

# THANK YOU!!!

# End

# LANDSCAPE INSPIRATION



#### LANDSCAPE VISUALIZATION





#### LANDSCAPE PLANTING IDEAS



#### **RICHARDSONIAN ROMANESQUE**





#### **Key Features:**

- Emphasizes clear, strong picturesque massing
- Round-headed "Romanesque" arches and recessed entrances
- Richly varied rustication
- Blank stretches of walling contrasting with bands of windows
- Cylindrical towers with conical caps embedded in the walling
- Prominent Horizontal Banding

#### **RICHARDSONIAN ROMANESQUE**



#### **Key Features:**

- Emphasizes clear, strong picturesque massing
- Round-headed "Romanesque" arches and recessed entrances
- Richly varied rustication
- Blank stretches of walling contrasting with bands of windows
- Cylindrical towers with conical caps embedded in the walling
- Prominent Horizontal Banding

# The Secretary of the Interior's Standards for the Treatment of Historic Properties: **Rehabilitation**

A new addition must preserve the building's historic character, form, significant materials, and features. It must be compatible with the massing, size, scale, and design of the historic <u>building while differentiated from the historic building</u>. It should also be designed and constructed so that the essential form and integrity of the historic building would remain if the addition were to be removed in the future.







# **FIELD TRIP LOCATIONS**



# TOWN DEPARTMENT MEETINGS

- Fire Department
  - Chief JP Benoit
- Police Department
  - Chief Mike Sallese
- Green Advisory Committee
  - Arnie Epstein
  - John Colonna-Romano
- Traffic and Parking
  - Mike Sallese
- Zoning
  - Valerie Oorthuys
- Facilities
  - Frank Ramsbottom
  - Doug Hyde

- Green Advisory Committee Public Forum: Adoption of Specialized Energy Code
- Library Land Project



# LOWER LEVEL PLAN-WITH TERRACE





# UPPER LEVEL PLAN-WITH TERRACE

# update



#### **UPPER LEVEL PLAN (ADDITION)** update WITH TERRACE Counter with Storage and Sink Office/Storage Children's Program **Janitor Closet** Shaft Restroom Circulation Desk Elevator Open to Below Lobby Stairs 11' -Half height glass with -solid wall below Open to Seating Below Exterior Terrace \_\_\_\_\_New Carpeting\_\_\_\_\_ Children's Collection 12,505 books 95







# update





## **HISTORIC CONTEXT**



# **HISTORIC CONTEXT**

#### HISTORIC BUILDINGS IN STOW





GATES HOUSE



PARISH CHURCH

**GLEASONDALE MILL** 

STOW TOWN HALL

NATIONAL REGISTER **OF HISTORIC PLACES** IN STOW



RANDALL HALE HOMESTEAD



WALCOTT-WHITNEY HOUSE



**BROWN STOW HOUSE** 

**TENNEY HOMESTEAD** 



HAPGOOD WHITNEY HOUSE

102

# **STOW CONTEXT**



# **STOW CONTEXT**









#### SITE CONTEXT



# **REQUESTED FEEDBACK**



# **Community Room**



