

RANDALL LIBRARY PRELIMINARY DESIGN SUMMARY

TOWN MEETING - 5/10/2023

DESIGN DEVELOPMENT WORKSHOP 4

STOW, MA



designLAB architects

G2 G2 COLLABORATIVE
LANDSCAPE ARCHITECTURE

RANDALL LIBRARY PRELIMINARY DESIGN SUMMARY

TOWN MEETING - 5/10/2023
DESIGN DEVELOPMENT WORKSHOP 4
STOW, MA

designLAB 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

Introductions (10 min)

- Review Work Plan + Process Updates

Plan + Landscape Overview (30 min)

- Program Review
- Building Plan Overview
- Landscape Plan Overview

MEPFP Overview (30 min)

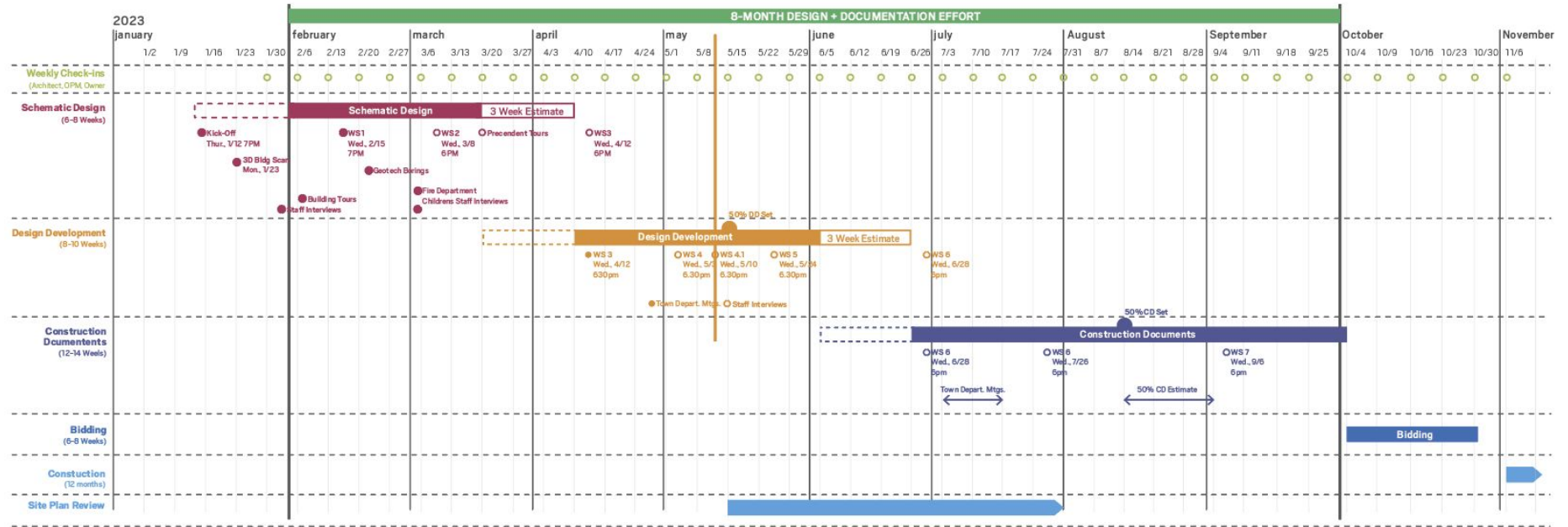
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Discussion + Next Steps (15 min)

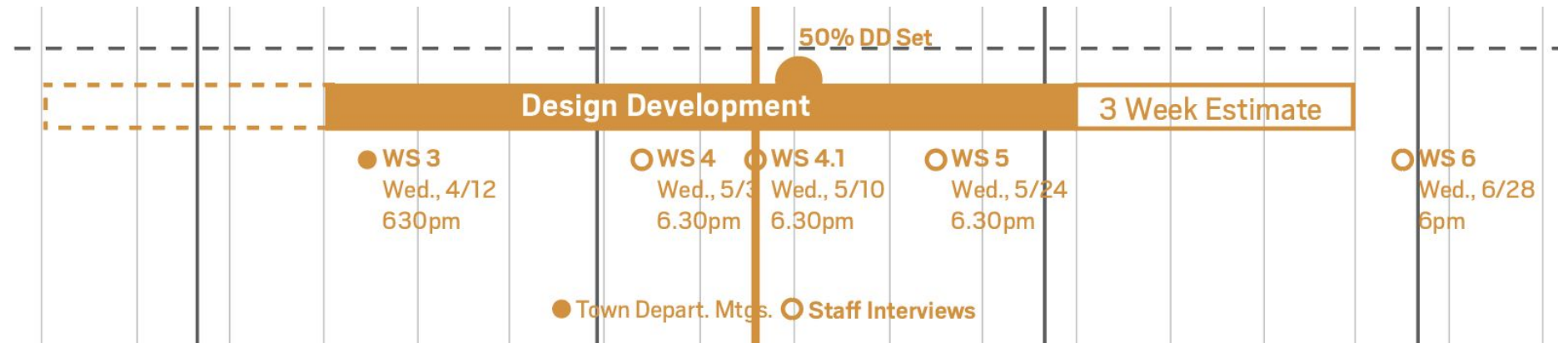
SCHEDULE

designLAB architects

Randall Library Renovation + Addition
Preliminary Workplan
03.08.2023



SCHEDULE



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**



TOWN DEPARTMENT MEETINGS

- **Fire Department**

- Calcs should just be for sprinkler system

- **Police Department**

- Only Exterior Cameras Required

- **Green Advisory Committee**

- Plan to use fully electric building

-

- **Traffic and Parking**

- Team has started One-way street transform

- **Zoning**

- Variance most likely required due to setbacks

- **Facilities**

- Irrigation
 - Septic
 - Existing Water Main



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-

Discussion + Next Steps (15 min)

PROGRAM SUMMARY

Site

- Keep the “Purple Tree”
- Garden Club needs small space to maintain
- Story time will be the main outdoor program
- Parking
 - Need as many as possible
 - 5 Min spot for book drop
- 2 Entrances
- Dumpster off of Crescent
- One-way street towards Great Rd

Meeting Rooms

- **3+** Small Rooms for tutors and clubs to meet simultaneously
 - 5-7 People
 - Knitting Club, Lego Club, Book Club, Puzzle Club, etc.
- **1** Large Flexible space for up to 30-40
 - Ghost, Trivia, Cookbook Club, etc.

Teen Space

- Audible Separation
- Visual Supervision
- 2:00-5:00, Arriving from middle school
- Programs
 - Hangout
 - Video games
 - Study
 - Eat
- Enter from upper level
- Two spaces
 - Quiet space
 - Activity Space

Staff Space

- Processing Space
 - Dedicated space
 - Could be behind circ. desk
- Work Room
 - Accessible from circ. Desk
- 2 Staffed Desks
- Break Room
- Storage

Collection

- 30,000 Volumes
- 2,000 Video
- Library of Things
 - Requires storage and display
- Will remain same size

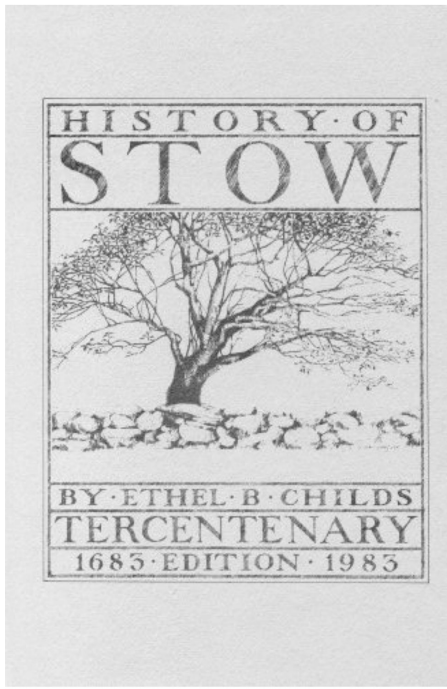
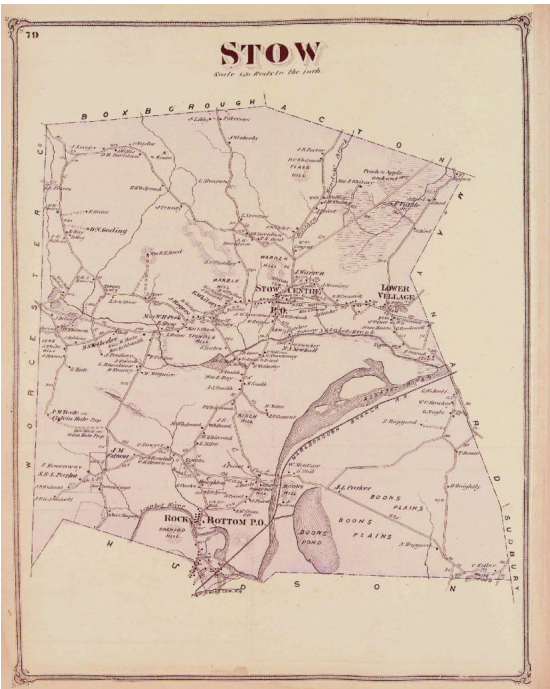
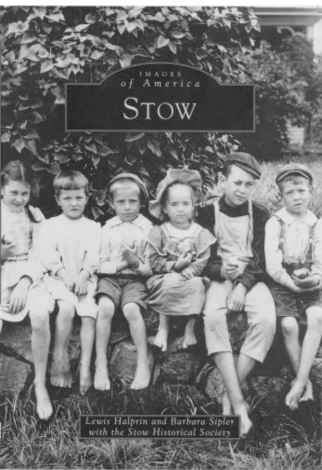
Reading

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

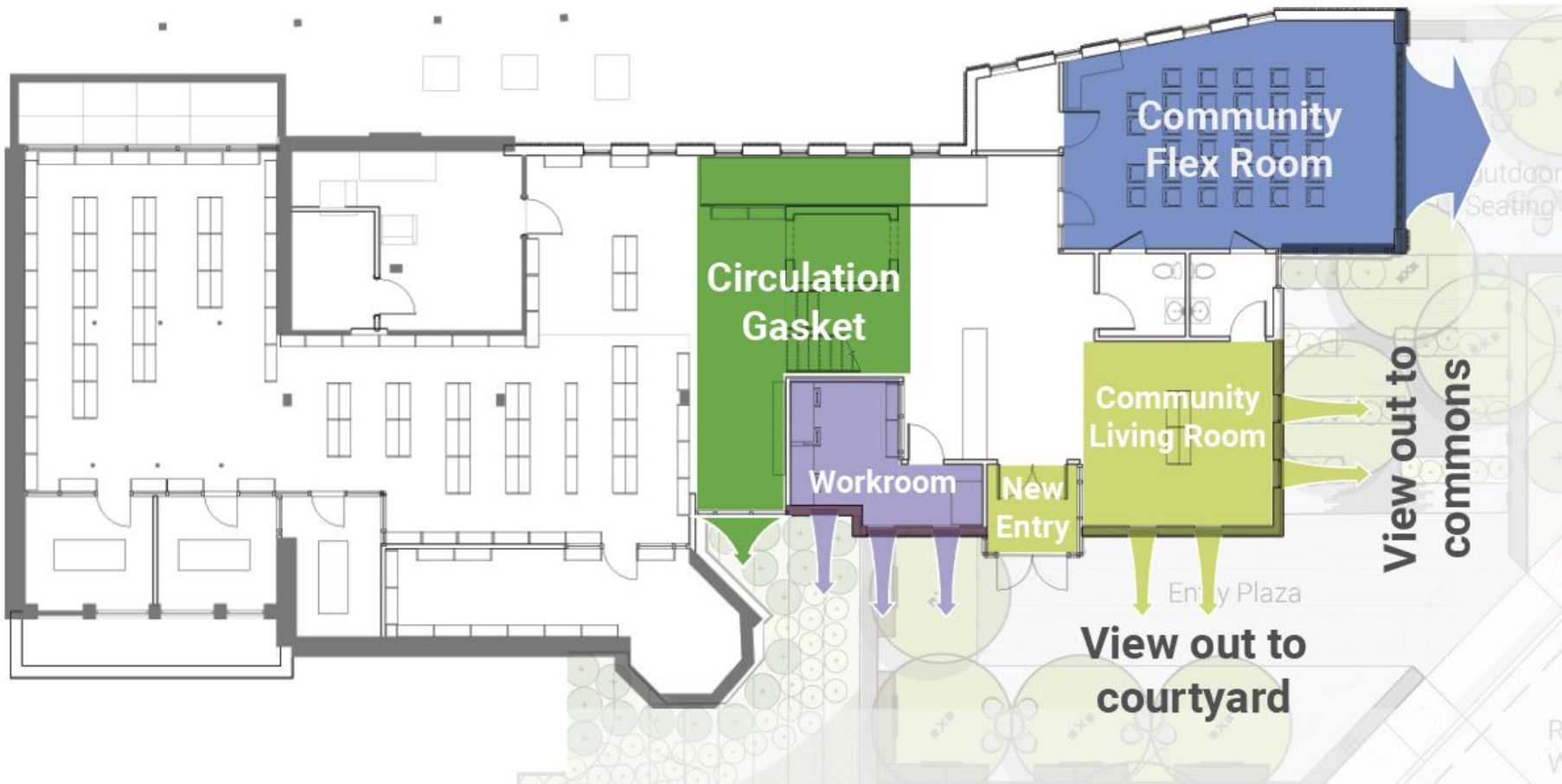
Childrens

- Small storytime
- Prep staging and storage
- Table space
- No separate program space
- No office required

HISTORIC CONTEXT



INTERIOR-EXTERIOR CONNECTION

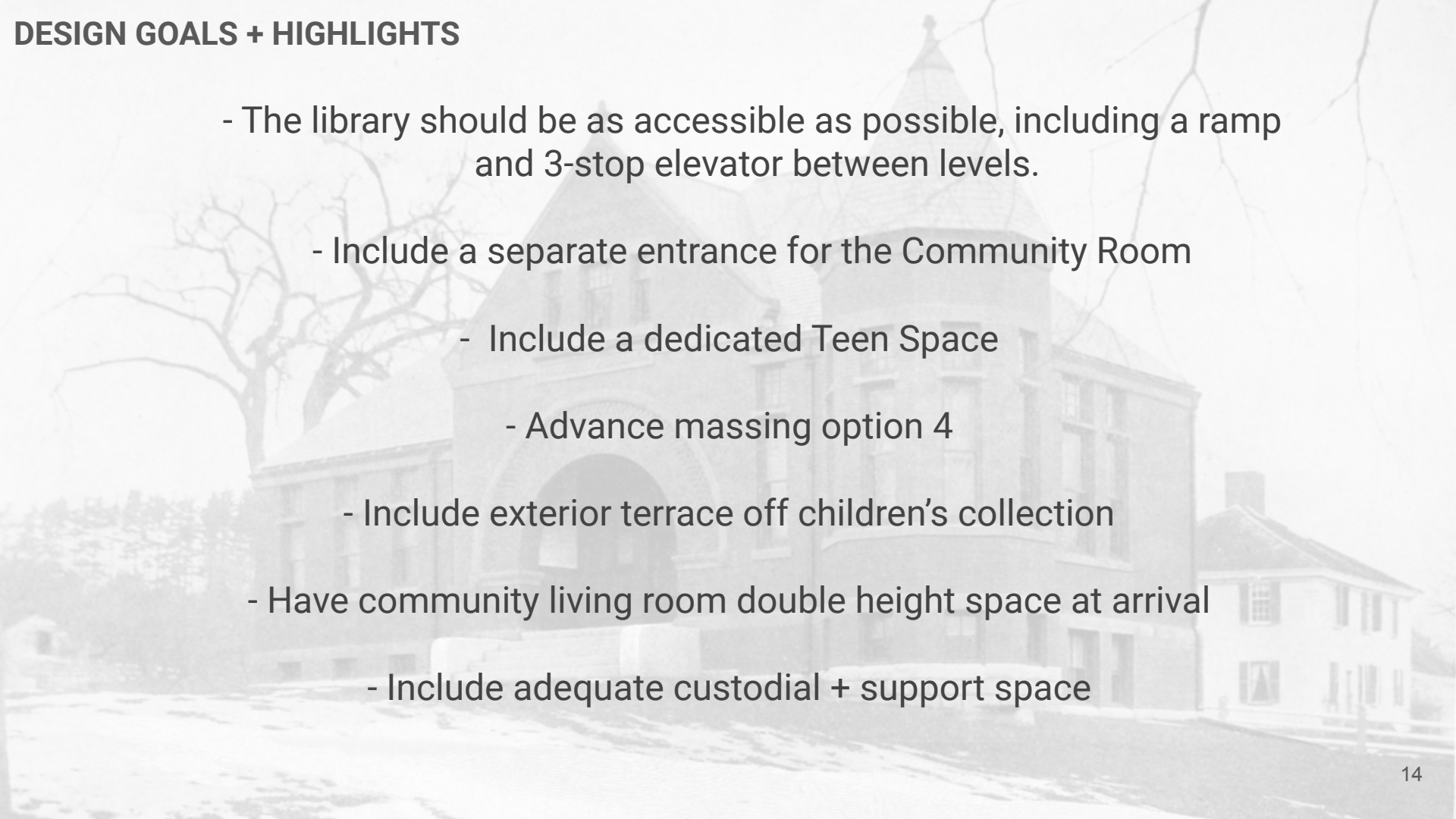


EXTERIOR FACADE STUDIES - SUMMARY



EXTERIOR FACADE STUDIES - SUMMARY

- Prefers low base.
- Prefers contrasting cap and field, with the cap matching the look of the existing roof.
- Less glass at double height space (Strategy 1)
- More architectural details to match existing (ie leaded windows, arch, turret)
- Materials to be more tactile (ie brick, stone, masonry)



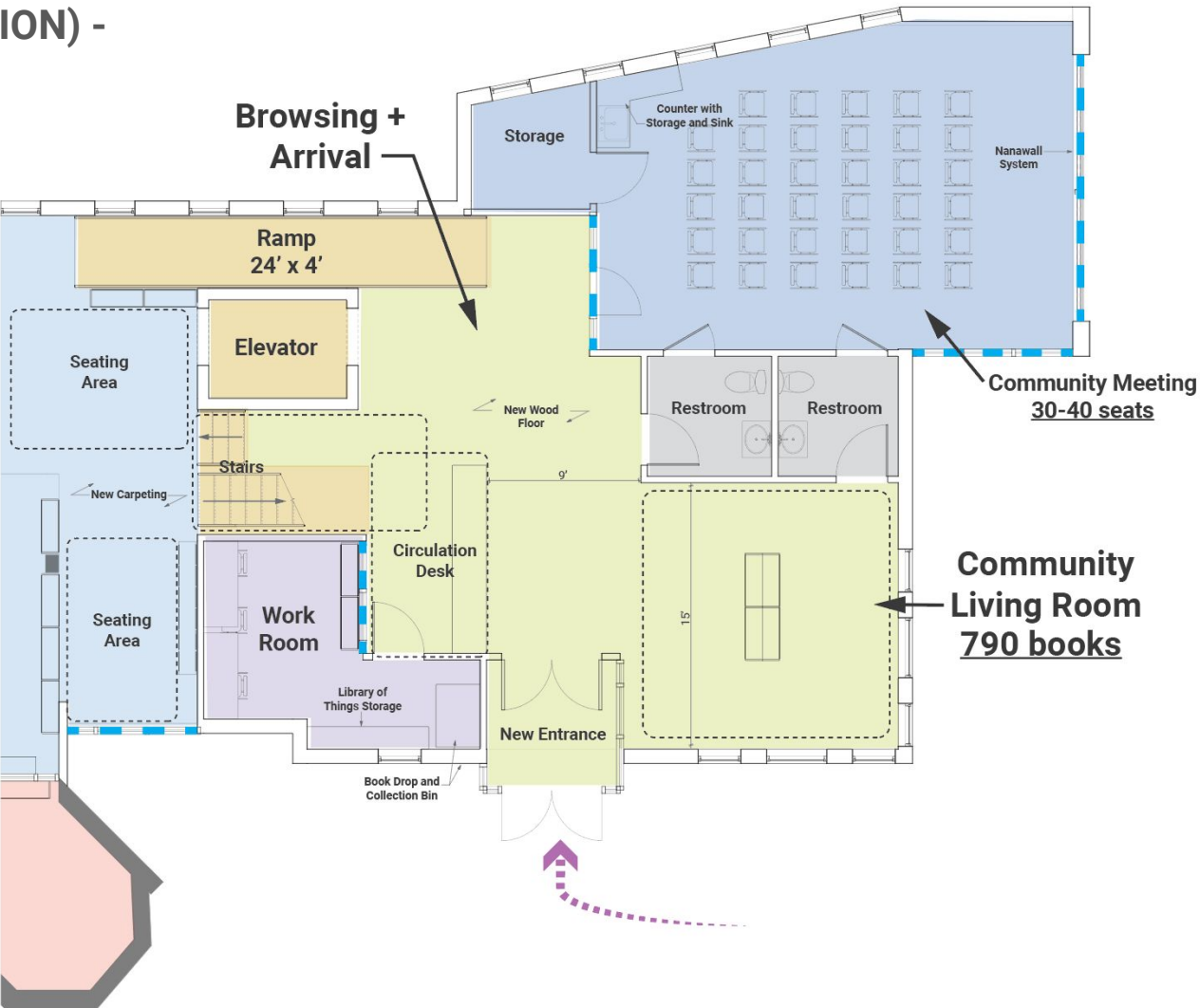
DESIGN GOALS + HIGHLIGHTS

- The library should be as accessible as possible, including a ramp and 3-stop elevator between levels.
- Include a separate entrance for the Community Room
 - Include a dedicated Teen Space
 - Advance massing option 4
- Include exterior terrace off children's collection
- Have community living room double height space at arrival
 - Include adequate custodial + support space

LOWER LEVEL PLAN- WITH TERRACE



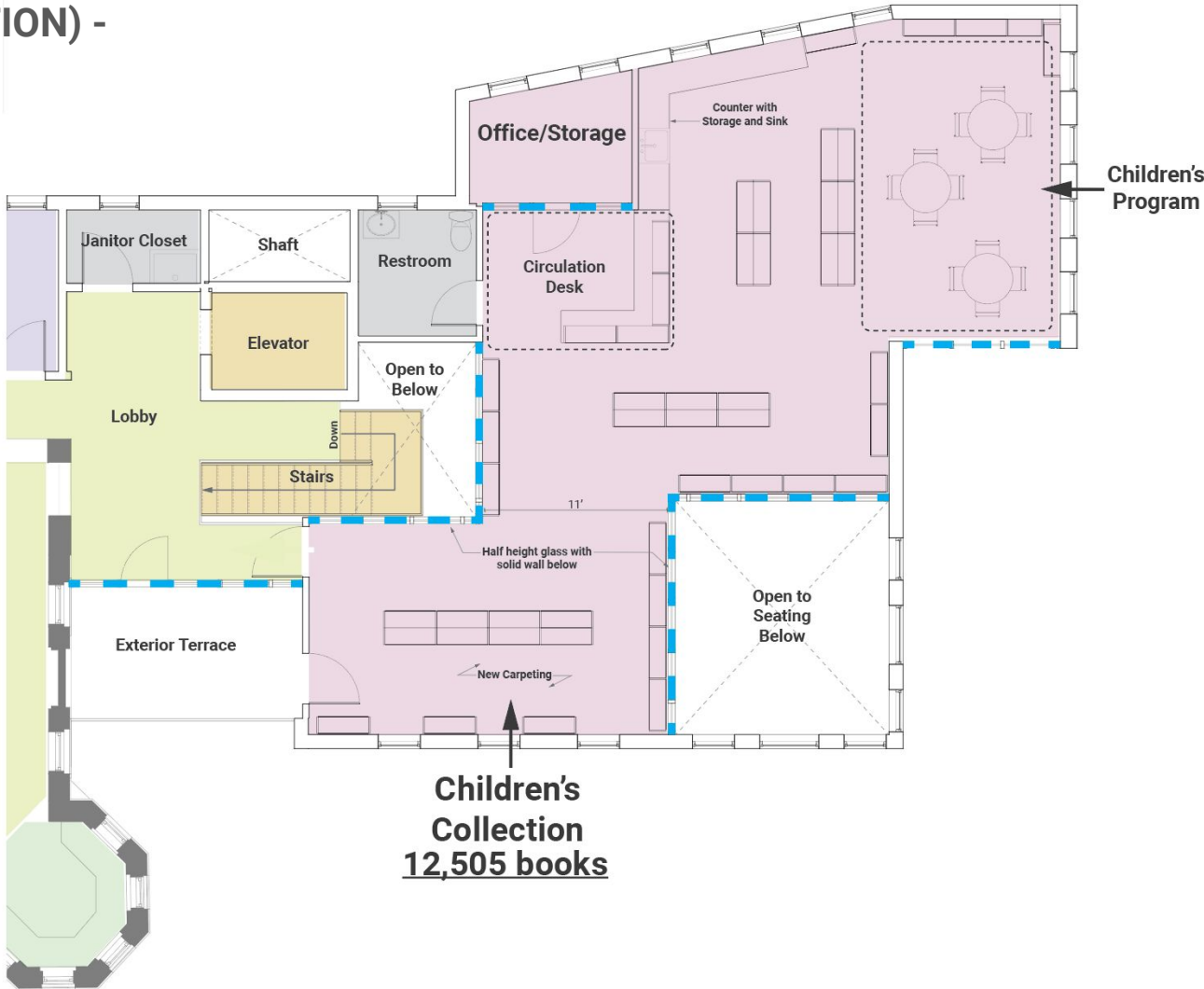
**LOWER LEVEL PLAN (ADDITION) -
WITH TERRACE**



UPPER LEVEL PLAN- WITH TERRACE



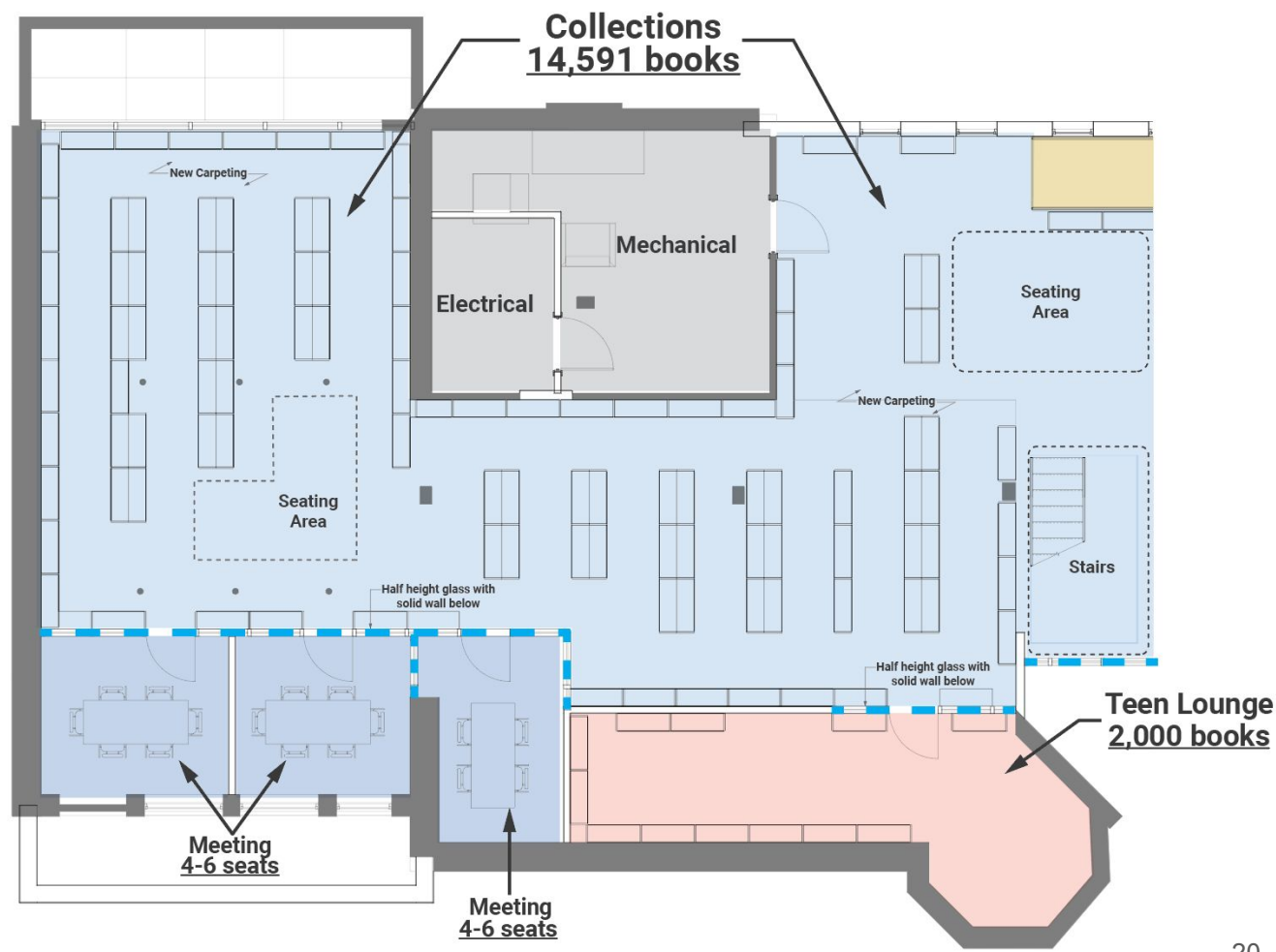
UPPER LEVEL PLAN (ADDITION) -
WITH TERRACE



LOWER LEVEL PLAN-
NO TERRACE

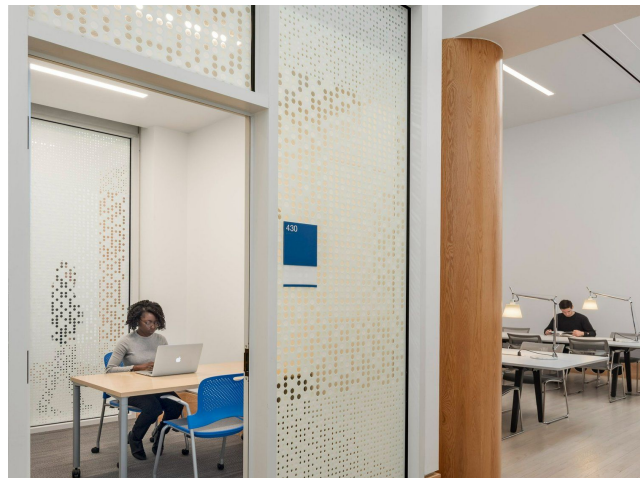
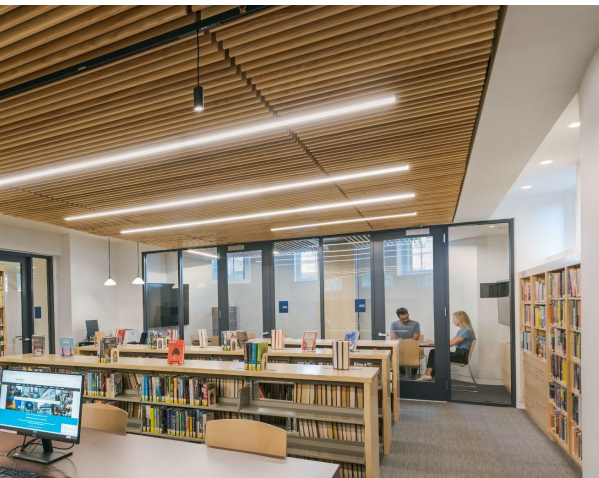


**LOWER LEVEL PLAN
(EXISTING)- WITH TERRACE**



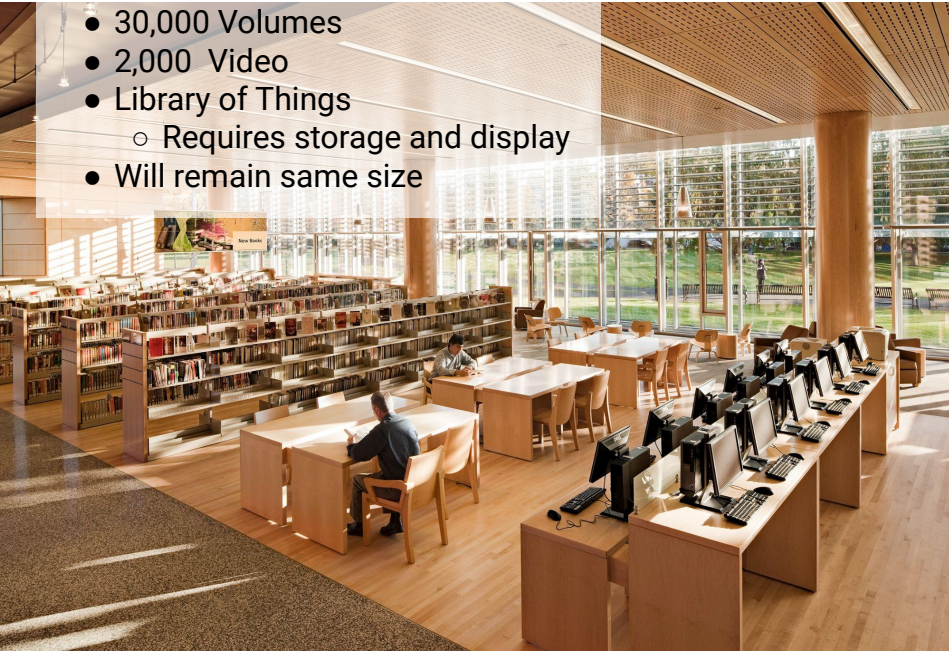
Meeting Rooms

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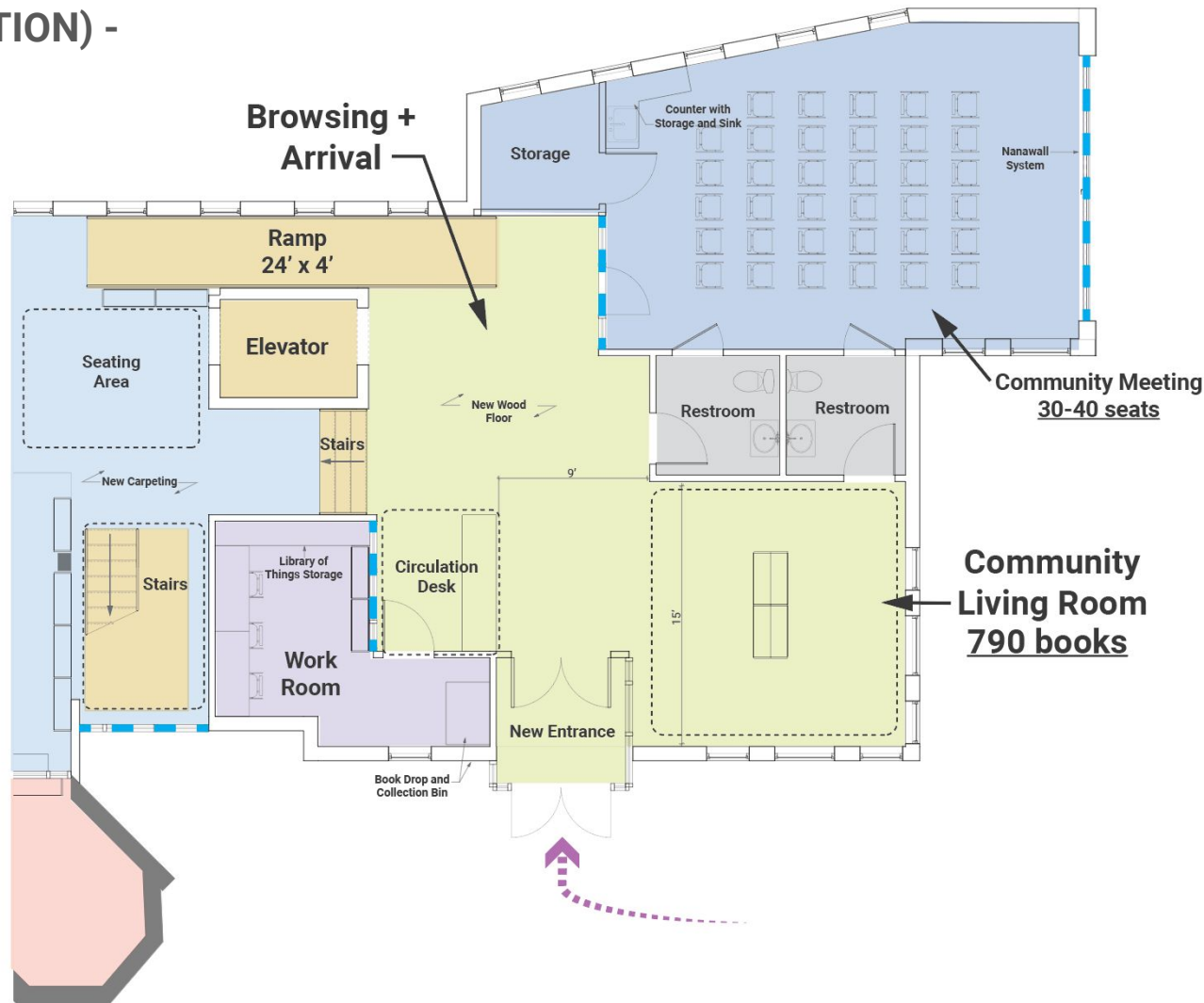


Teen Space

- Audible Separation
- Visual Supervision
- 2:00-5:00, Arriving from middle school
- Programs
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 - Study
 - Eat
- Enter from upper level
- Two spaces
 - Quiet space
 - Activity Space



**LOWER LEVEL PLAN (ADDITION) -
NO TERRACE**



Browsing and Arrival



Community Living Room



COMMUNITY LIVING ROOM



Community Room



Community Room



COMMUNITY MEETING ROOM



Circulation



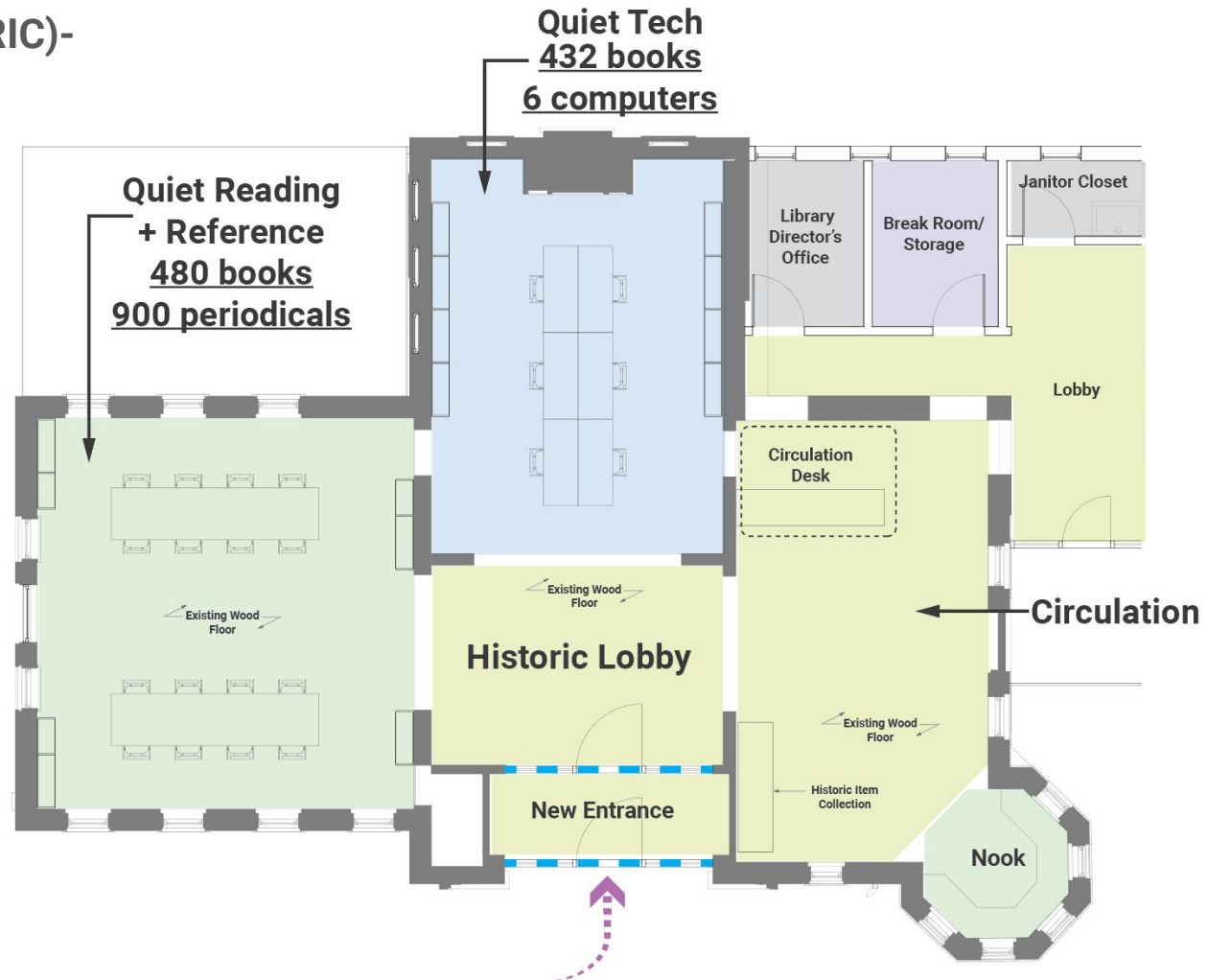
CIRCULATION GASKET - LOWER LEVEL



UPPER LEVEL PLAN -
NO TERRACE



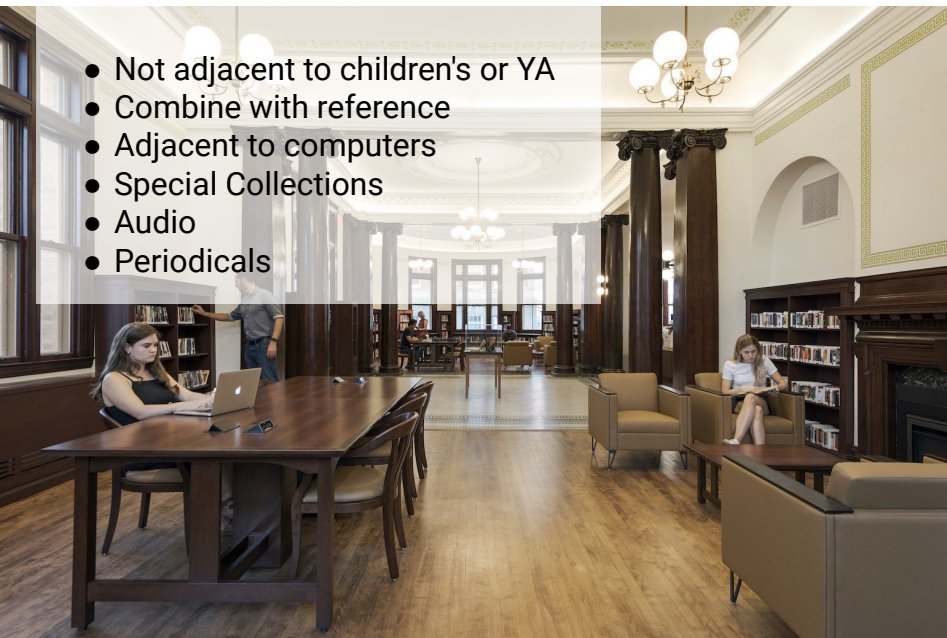
UPPER LEVEL PLAN (HISTORIC)-
WITH TERRACE



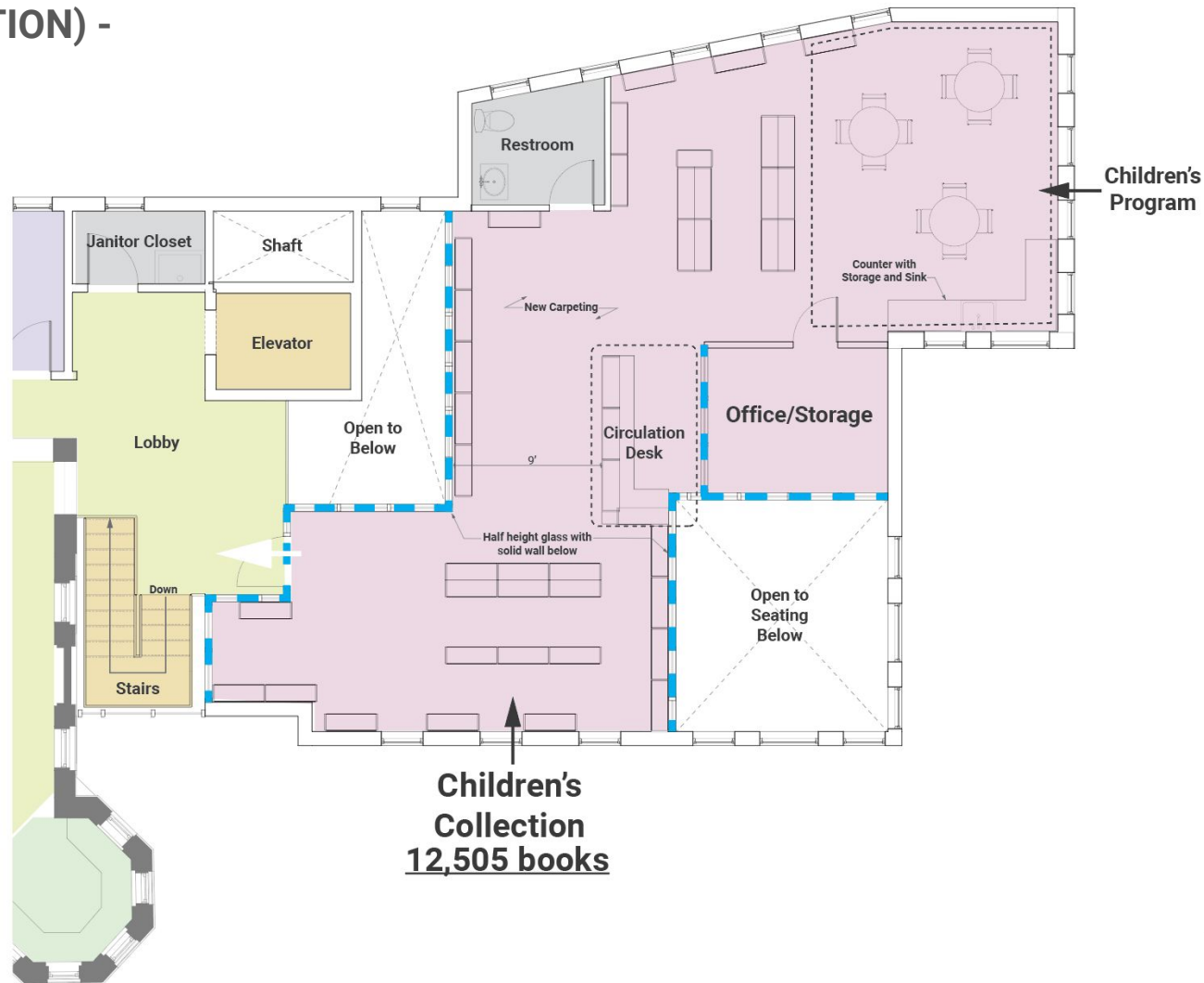
Historic Spaces

Reading

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



UPPER LEVEL PLAN (ADDITION) -
NO TERRACE



CIRCULATION GASKET - UPPER LEVEL



Children's Collection

- Small storytime
- Prep staging and storage
- Table space
- No separate program space
- No office required



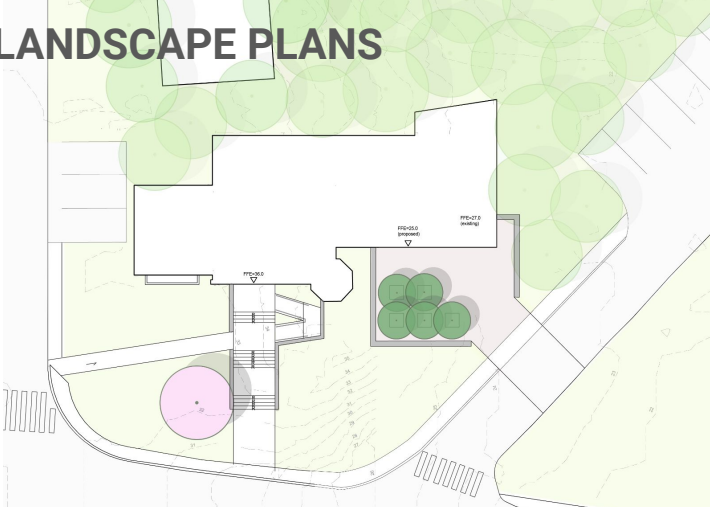
Children's Collection



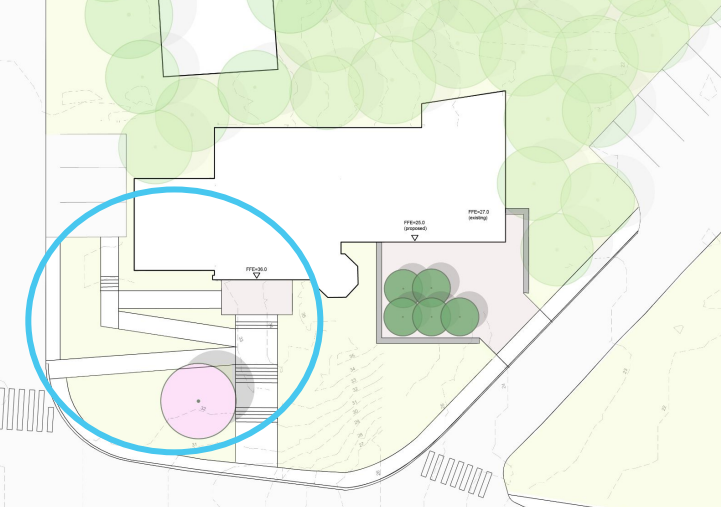
CHILDREN'S COLLECTION



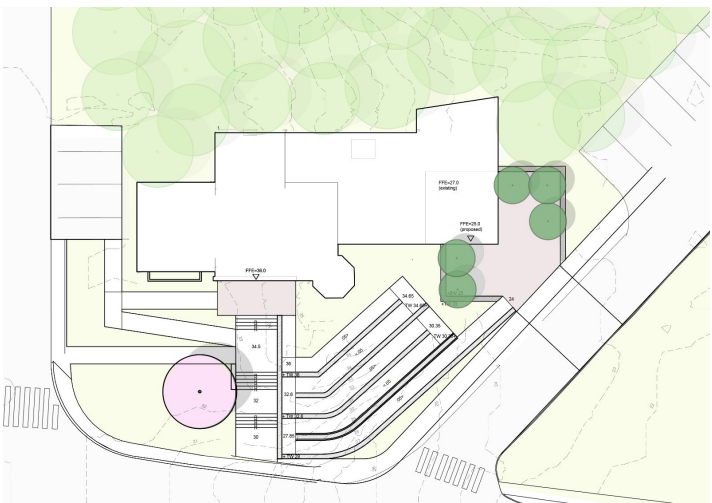
PREVIOUS LANDSCAPE PLANS



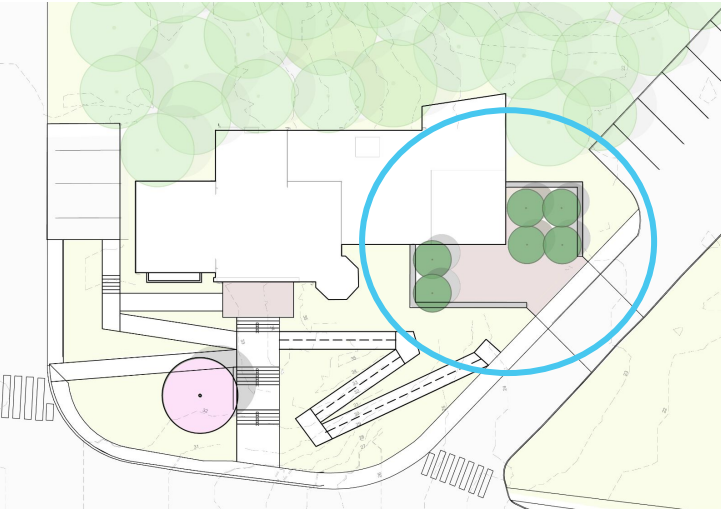
SCHEME A



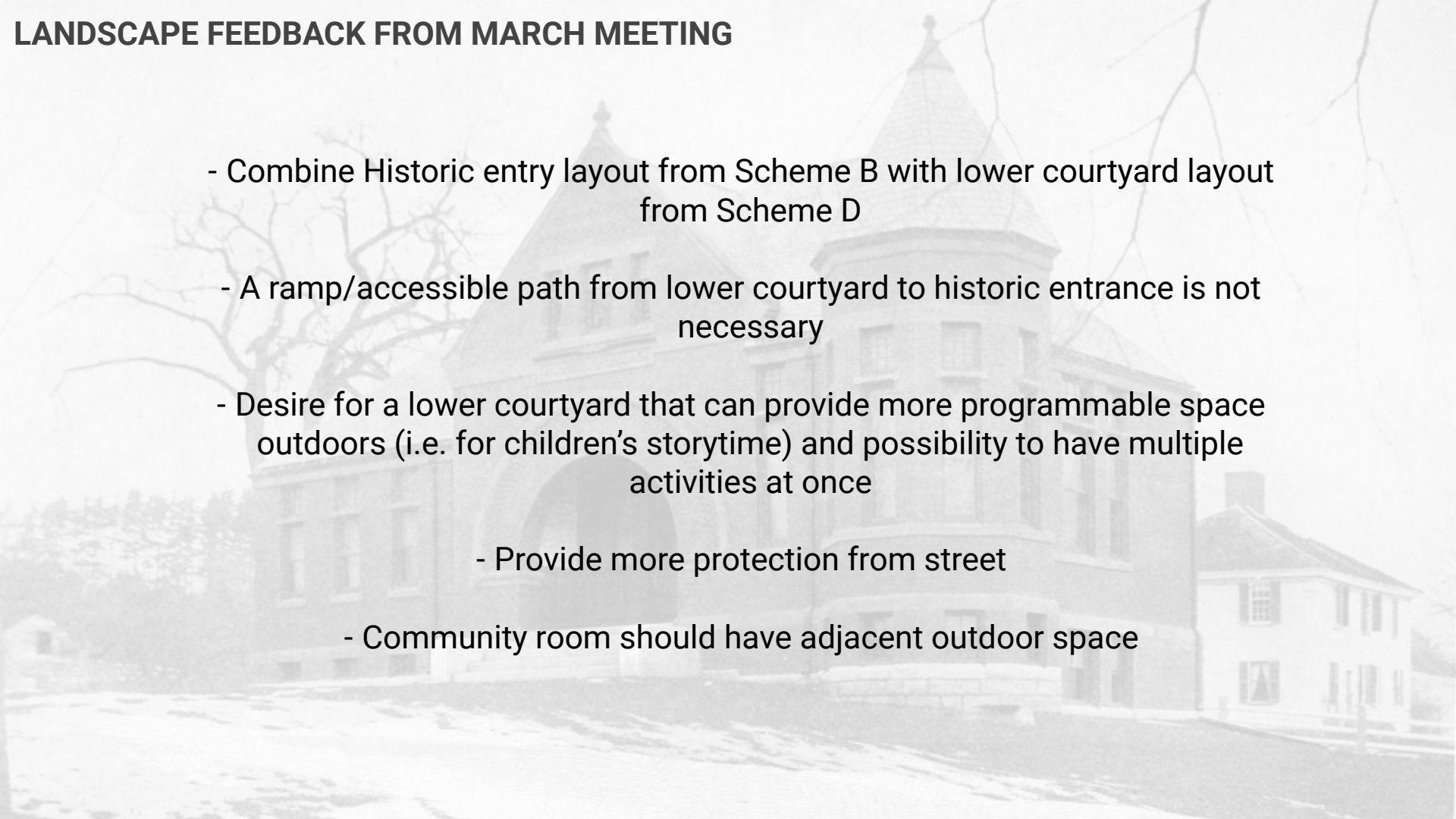
SCHEME B



SCHEME C



SCHEME D



LANDSCAPE FEEDBACK FROM MARCH MEETING

- Combine Historic entry layout from Scheme B with lower courtyard layout from Scheme D
- A ramp/accessible path from lower courtyard to historic entrance is not necessary
- Desire for a lower courtyard that can provide more programmable space outdoors (i.e. for children's storytime) and possibility to have multiple activities at once
 - Provide more protection from street
 - Community room should have adjacent outdoor space

LANDSCAPE PLAN



COURTYARD PROGRAM

CHILDREN'S STORYTIME



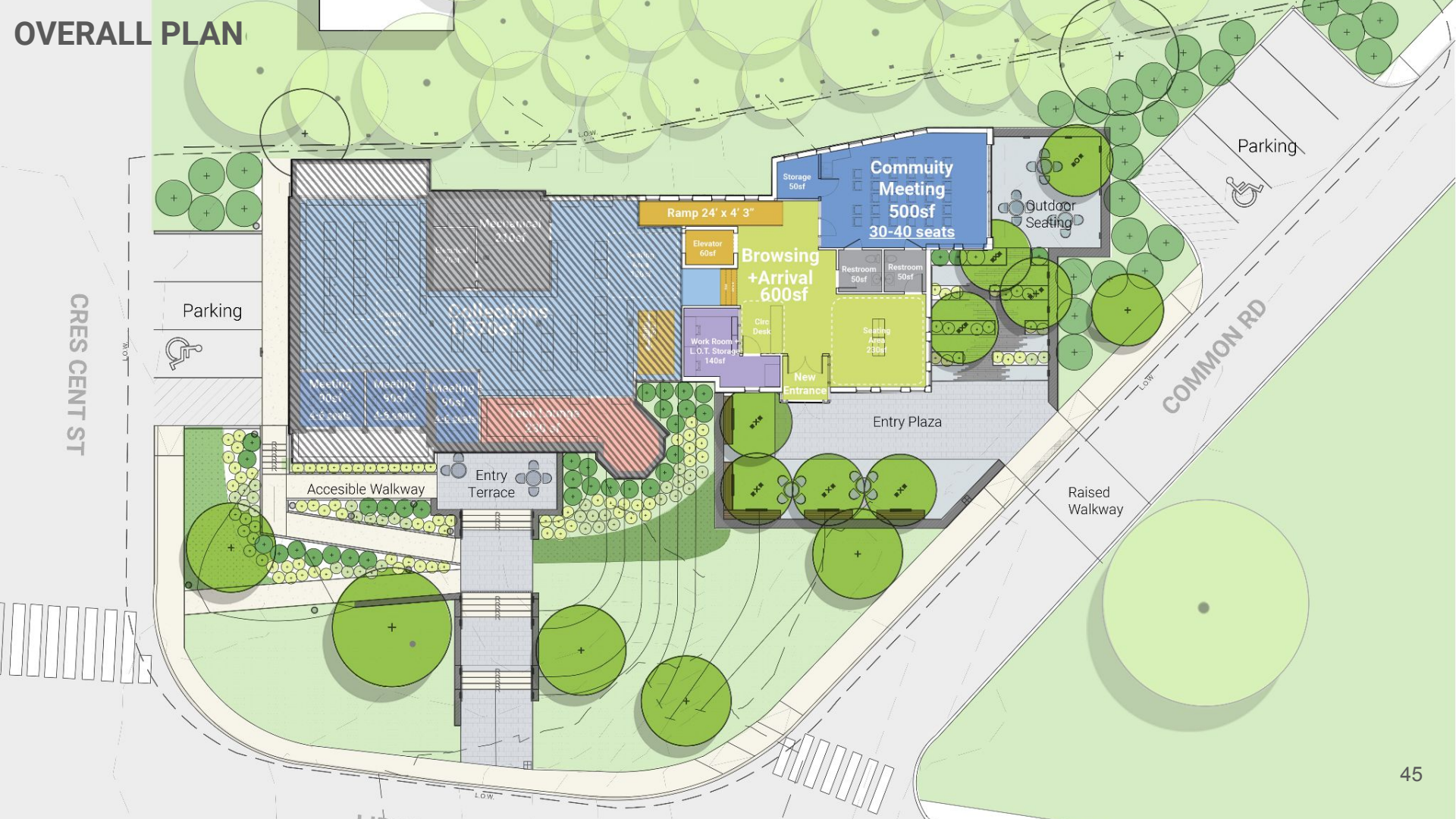
BOOK FAIR



COCKTAIL HOUR/ FUNDRAISER



OVERALL PLAN



UPPER LEVEL PLAN -
NO TERRACE



LOWER LEVEL PLAN-
NO TERRACE



Today's Agenda

Introductions (10 min)

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MEPFP Overview (30 min)

Discussion + Next Steps (15 min)

Mechanical Electrical Plumbing and Fire Protection Systems

- Introductions

Town Input into System Concepts

Mechanical Electrical Plumbing and Fire Protection Systems

- Introductions

- Town Input into System Concepts

- Design Goals

HVAC System

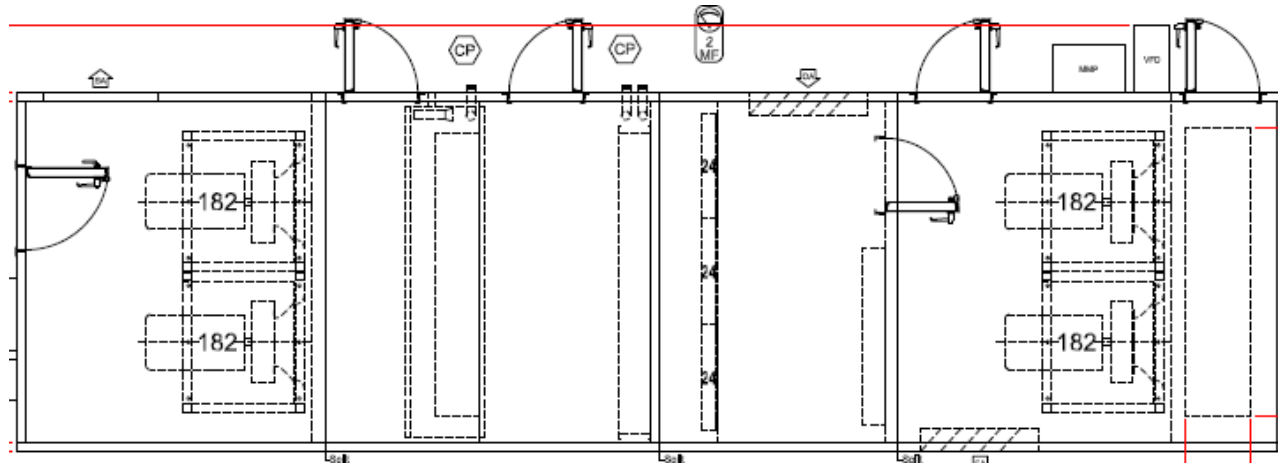
Air Handling Unit

Provides Heating, Cooling and Ventilation Air

Variable Amounts of Ventilation air

Variable flow of Air

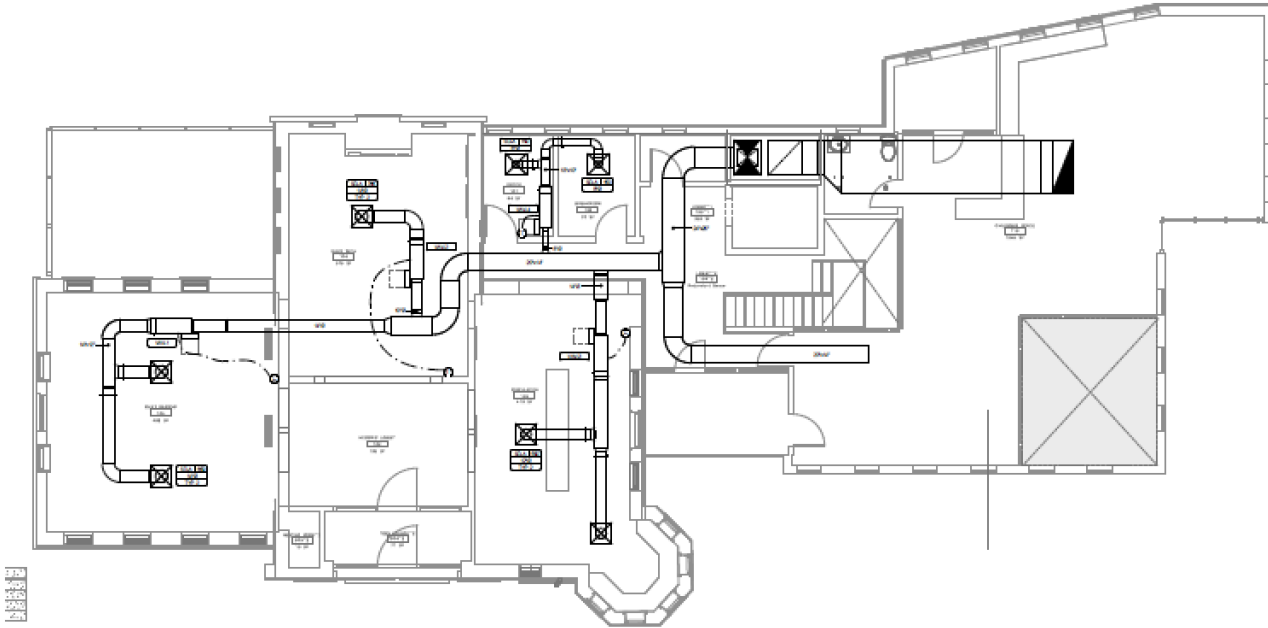
Ability to use 100% Outside Air for free cooling



Variable Volume Terminal Unit

VAV units will provide heating or cooling air to meet the zone requirements.

VAVs can be set to close off when the space is not occupied.



HVAC System Heat Pumps and Boilers

HOW DOES IT WORK?

A typical refrigerant loop in a heat pump collects heat energy from outside and transfers it inside. The flash injection process uses a bypass circuit to reroute a portion of the refrigerant to two places. Hot refrigerant flows back to the indoor coil to enhance heating.

Colder refrigerant is injected back into the compressor to allow it to run at faster speeds to produce high-performance heat exchange.

In cold climates, heat pumps typically experience a decrease in pressure, refrigerant flow rate and operational capacity. Variable-capacity heat pumps with Hyper-Heating INVERTER® (H2i®) technology allow for higher compressor heating speeds at lower outdoor air temperatures, without putting extra strain on the unit or potentially causing long-term damage to the compressor. These are true cold-climate heat pumps designed to deliver 100% of heating capacity down to 5° F. This innovation means in all climates can experience the benefits of INVERTER-driven, variable-capacity heat pumps listed below:



Hot Water Boilers

Hot water is needed to heat the air at each zone
Hot Water can be generated by Electricity or Natural Gas.
Can be used as a back up heating source at the AHU.

Electrical

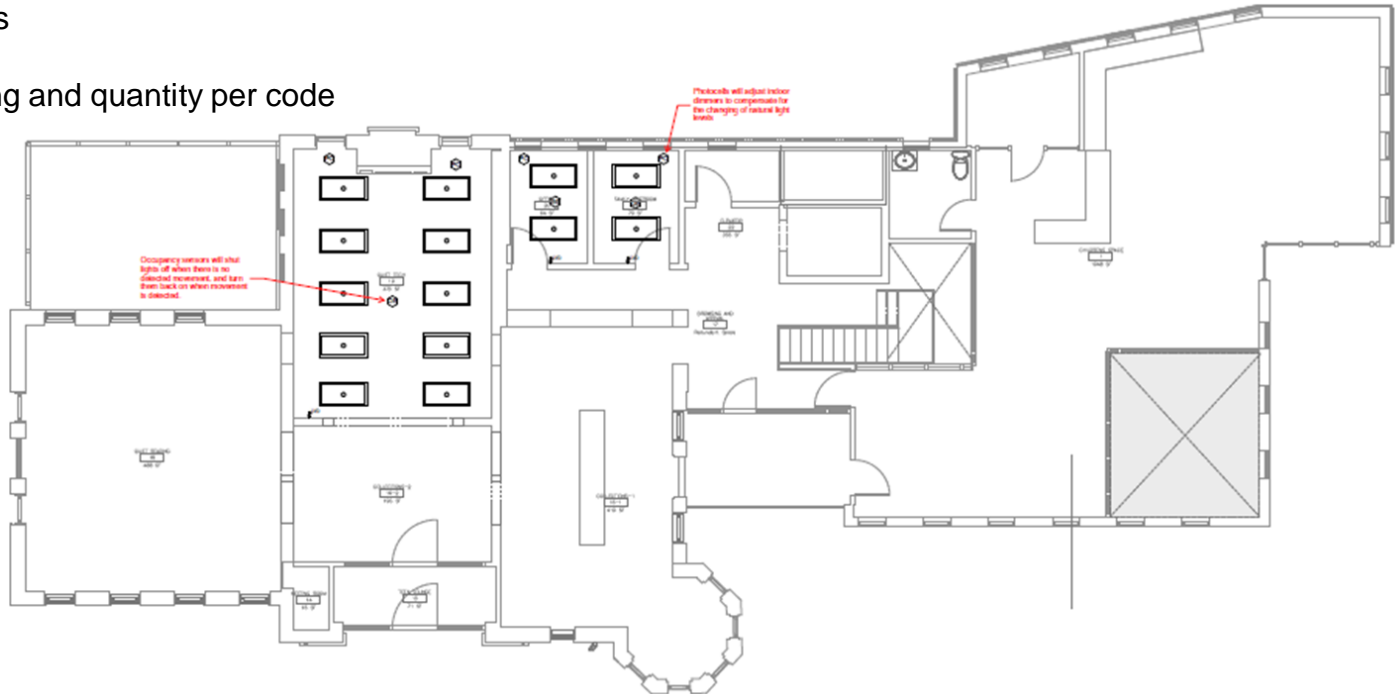
Electrical Service Upgrade

LED Lighting

Photo Sensors

PhotoCells

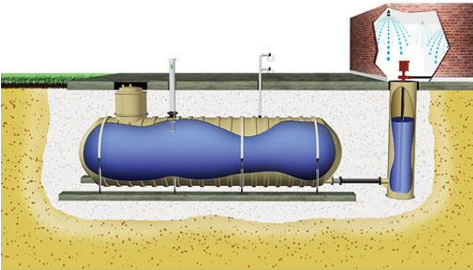
Outlets spacing and quantity per code



Fire Protection

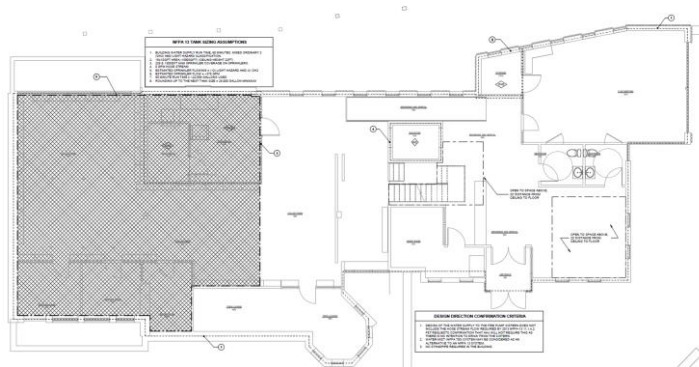
Conventional Fire Protection System

- Diesel Driven Fire Pump
- 25,000 -30,000 Gallon Storage Tank sized Per FD 1 hour run time
- Tank approx. 12' dia. x 30 ft long
- FP Room 20 Ft long 10 FT wide



Water Mist Fire Protection System

- High Pressure Pump
- Gas Driven pump or Electric
- Reduced water Storage tank 2,000 – 4,000 gallons
- Uncommon, higher maintenance costs





Thank You

Today's Agenda

Introductions (10 min)

- Review Work Plan + Process Updates

Plan + Landscape Overview (30 min)

- Program Review
- Building Plan Overview
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MEPFP Overview (30 min)

-

Discussion + Next Steps (15 min)

A photograph of a brick building, identified as the Randal Library, featuring a large arched window and a sign above it. The image is overlaid with a teal color filter. The text "THANK YOU!!!" is centered over the building.

THANK YOU!!!

End

PROPOSED SCHEME



EXISTING GRADE CHANGE



EXISTING FFE ~ +36'

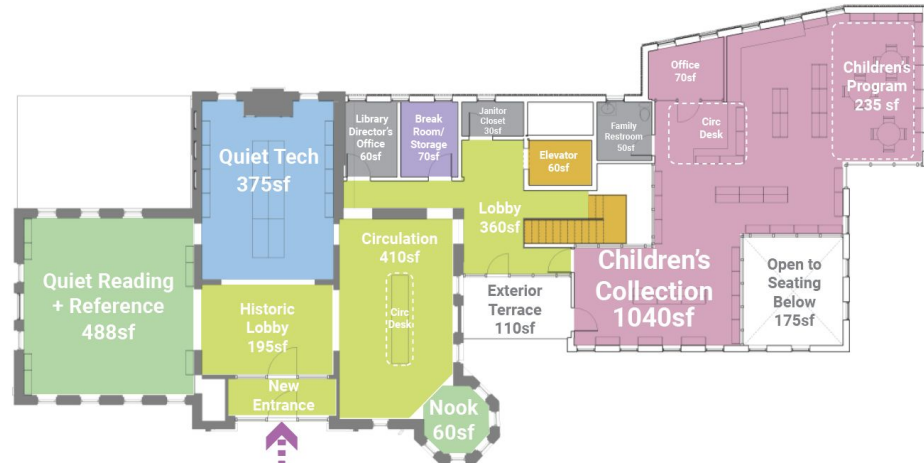
PROPOSED COURTYARD ~ +24-25'

UPDATE

- Gasket
- Cap
- Field
- Base
- Windows

Open Corner Option

- Double height Community Living Room
- Larger Collection Space
- Library collection in Collections
- Storage in Community Meeting
- Storage and office in Children's Collection
- Circulation centrally located in gasket
- Small Meeting Rooms and Teen Lounge located off Collection Space



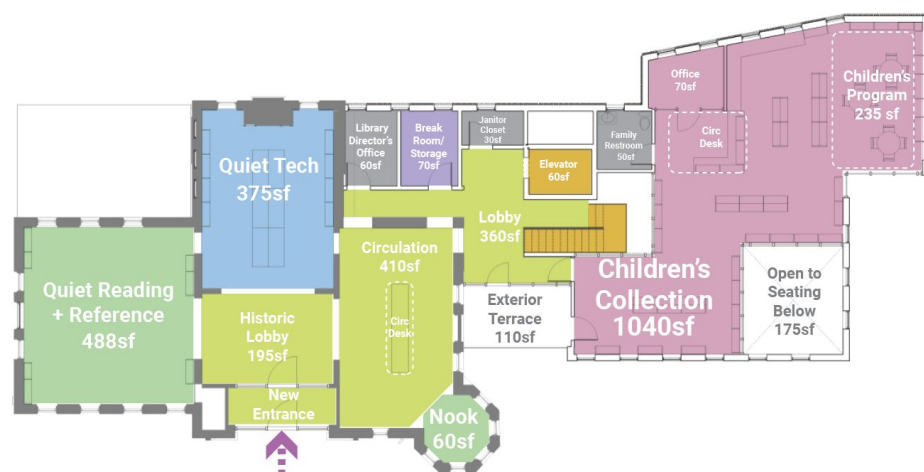
Level 2



Lower Level

Open Corner Option

- Double height Community Living Room
- Larger Collection Space
- Library collection in Collections
- Storage in Community Meeting
- Storage and office in Children's Collection
- Circulation centrally located in gasket
- Small Meeting Rooms and Teen Lounge located off Collection Space



Level 2



Lower Level

Collection Size

Calculations by dLAB

Classification	Shelf Height (inches)	Shelf vertical count	shelf width (feet)	bookcase count (one sided)	avg per LF	open		Totals
1-339	10.25	7	9	3	11	10%		2079
339-973	12.25	6	9	9	10	20%		4860
new non fiction	12	4	3	1	11	20		132
travel	11	4	3	2	15	20		360
oversize	15	2						0
							Non Fiction Total	7431
mystery	10.25	6	9	3	9	18%		1458
Romance	8.25	8	6	1	10.5	5%		504
Fiction	11.25	7	3	30	9	20%		5670
large print	12	3	3	4	9	8		324
Graphic Novels	12	3	3	1	14	15		126
							Fiction Total	8082
YA Fiction	11	7	3	7	9	15%		1323
YA Graphic Novel	12	6	3	1	16	15		288
YA Non-fiction	13	5	3	1	14	20		210
							Teen Total	1821
Childrens picture books	14	3	3	12	28			3024
childrens nonfiction/reference/poetry	16	4	3	2	25	5%		600
childrens nonfiction/reference/poetry	11.5	5	3	6	25	5%		2250
Kid's chapter books	12	5	2	2	13	5%		260
Kid's chapter books	12	5	3	8	13	5%		1560
Easy readers	10	6	3	8	26	10%		3744
Easy Readers	10	2	2.3	1	26			119.6
Baby	12	3	3	1	20			180
junior graphic novels	12	6	3	1	23			414
							Children's Total	12151.6

Counts from Randall Library

Adult

- 15,737 books
- 1,792 video
- 1,922 audio (books on CD/music CD)

Young Adult

- 1,653 books
- 0 video
- 38 audio

Children's

- 12,249 books
- 602 video
- 193 audio



Collection Distribution



Level 2



Lower Level



Today's Agenda **UPDATE**

Introductions (10 min)

- Review Work Plan + Process Updates

Exterior Committee (45 min)

- Field Trip Feedback
- Review Goals + Guiding Principles
- Review Existing Building Analysis + Massing Options
- Review Material Palette Options

Landscape (15 min)

- Review Updated Plan
- Cistern Locations
- SD Estimate Review

Building Committee (60 min)

- Review Updated Building Program
- Review Updated Plan Options

Discussion + Next Steps (15 min)

Next Steps

UPDATE

- **WS4**
 - **MEPFP Engineer update**
 - **Landscape Design Update**
- **Schedule dept meetings**
- **Design Development Phase**
- **Exterior Materials**

MATERIAL PALETTE

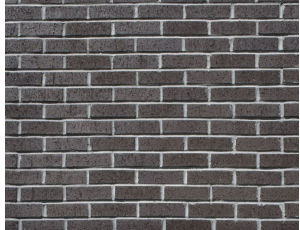
CAP



FIELD



BASE

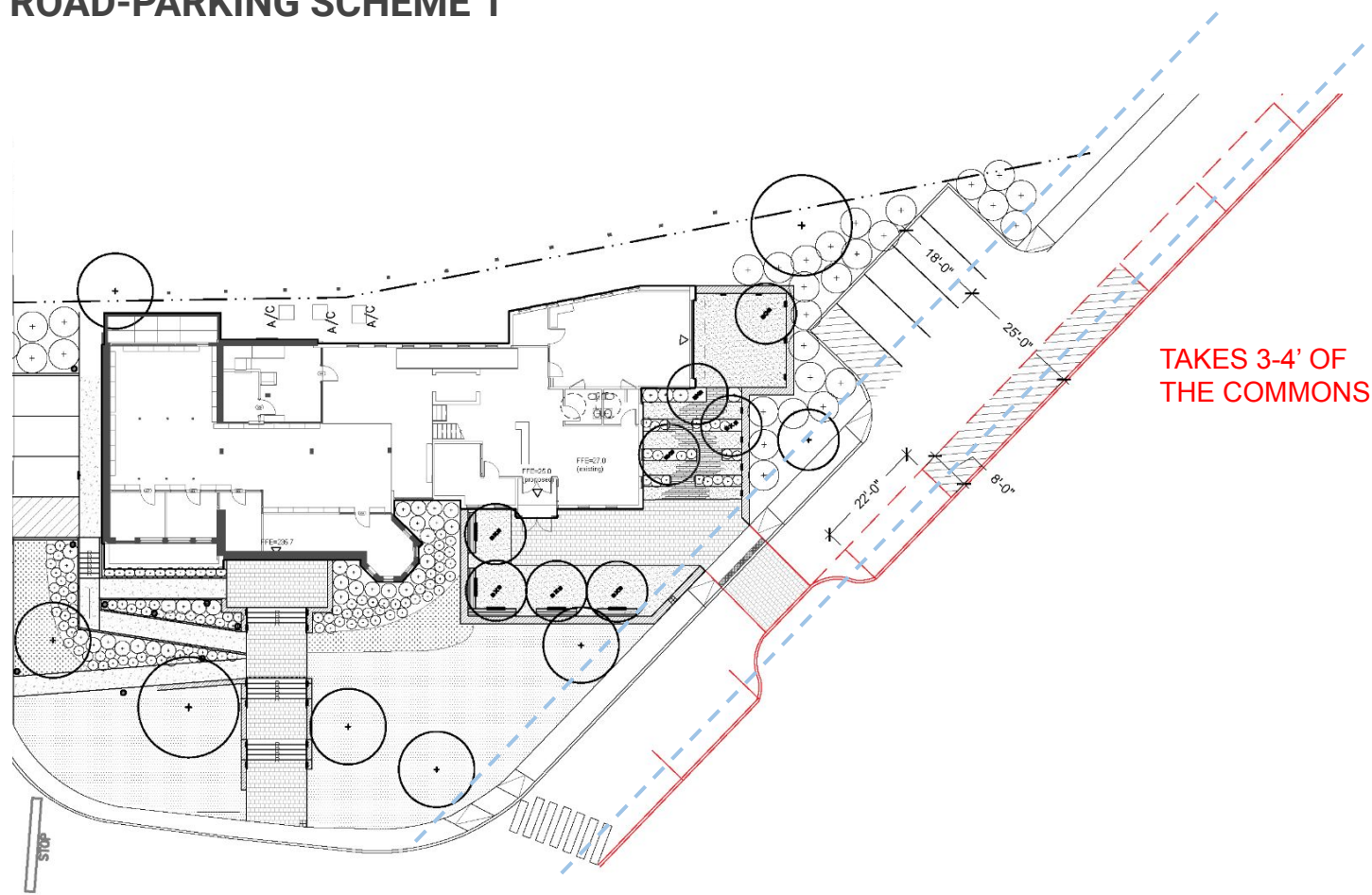


HISTORIC CONTEXT



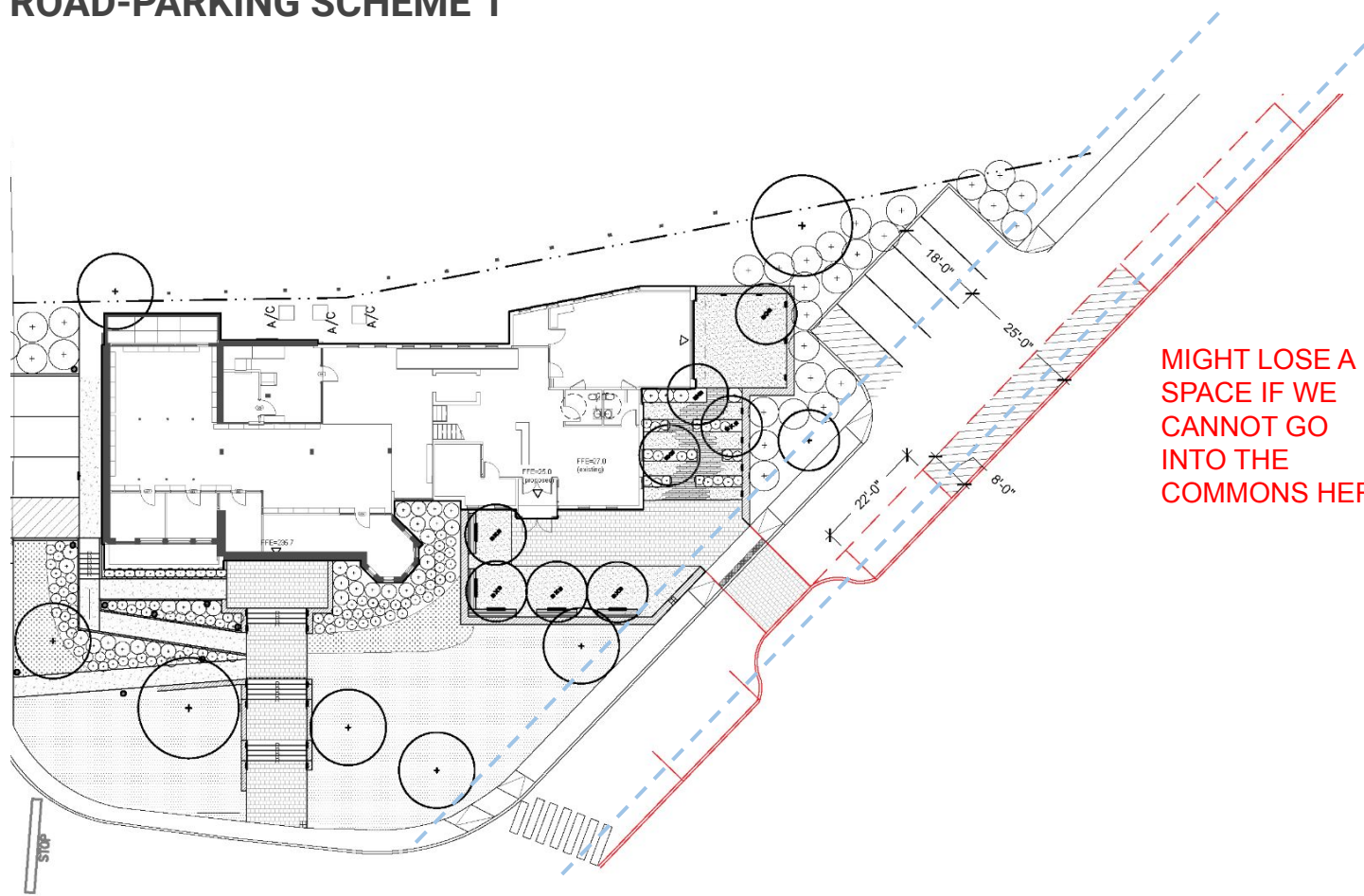
COMMON ROAD-PARKING SCHEME 1

One-way



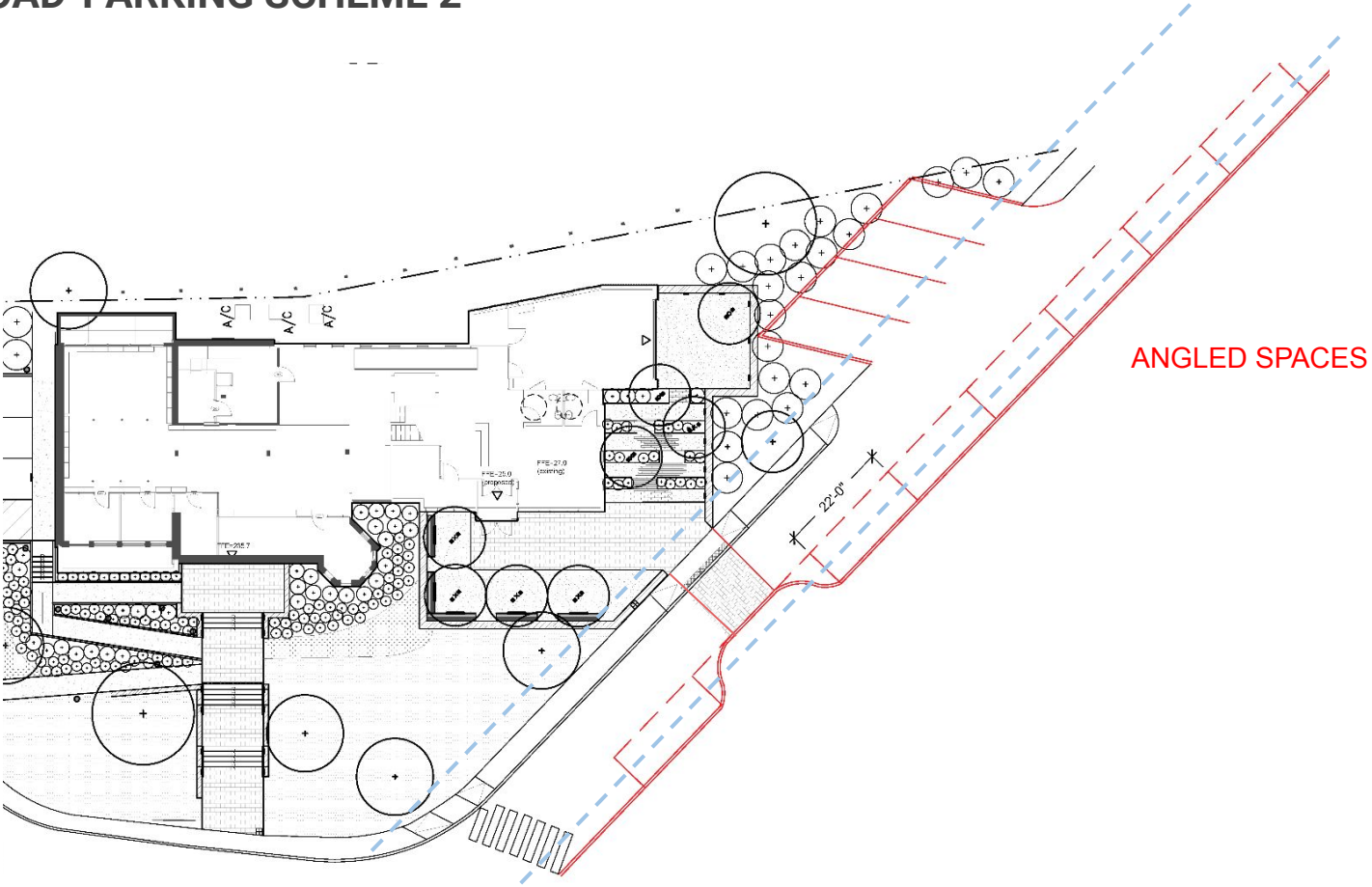
COMMON ROAD-PARKING SCHEME 1

One-way



COMMON ROAD-PARKING SCHEME 2

One-way



FIELD TRIP LOCATIONS

