



# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

January 15, 2020



# PROJECT TEAM

<b>CLIENT:</b>	Town of Shelburne, Pierson Library
<b>ARCHITECTURE:</b>	Vermont Integrated Architecture, P.C.
<b>LIBRARY CONSULTING:</b>	Barbara Doyle-Wilch
<b>CIVIL ENGINEER:</b>	Engineering Ventures, P.C.
<b>STRUCTURAL ENGINEER:</b>	Engineering Ventures, P.C.
<b>MEP+FP ENGINEER:</b>	LN Consulting, Inc.
<b>ENERGY CONSULTING:</b>	Energy Balance
<b>ENVELOPE CONSULTING:</b>	BVH Integrated Services
<b>COMMISSIONING:</b>	CX Associates
<b>GEOTECHNICAL ENGINEER:</b>	S.W. Cole, Inc.
<b>LANDSCAPE DESIGN:</b>	Paintbox Gardens
<b>EFFICIENCY VERMONT:</b>	Charlie Carpenter
<b>CONSTRUCTION MANAGER:</b>	Neagley & Chase Construction Company Countless Community Members, Subcontractors, and Vendors

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## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

## TOWN OF SHELBURNE

- Population 7144-7759
- 27.6% under 18
- 3.9% 18 - 24
- 25.9% 25 - 44
- 27.2% 45 - 64
- 15.4% 65 and over

### Project Goals:

- Build a 21st century library.
- Conserve and protect the historic Town Hall.
- Strengthen the commercial, civic, and social center of Shelburne Village.

## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# EXISTING CONDITIONS

## Site:

- Inefficient parking and under utilized spaces.
- Indirect access for emergency services.
- Disconnected and unsafe pedestrian routes.
- Existing buildings of mixed historic character.
- Diverse mix of uses including municipal, library, retail, sport and recreation at central location



# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# EXISTING CONDITIONS

## Library Building:

- Under-sized, confined spaces.
- Water infiltration, damage, and associated dampness.
- Inefficient building envelope and mechanical systems.
- Difficult user access and circulation.
- Limited natural light.
- Inadequate stack space.
- Lacking energy efficiency.
- Lacking ADA accommodations.



# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# EXISTING CONDITIONS

## Historic Town Hall:

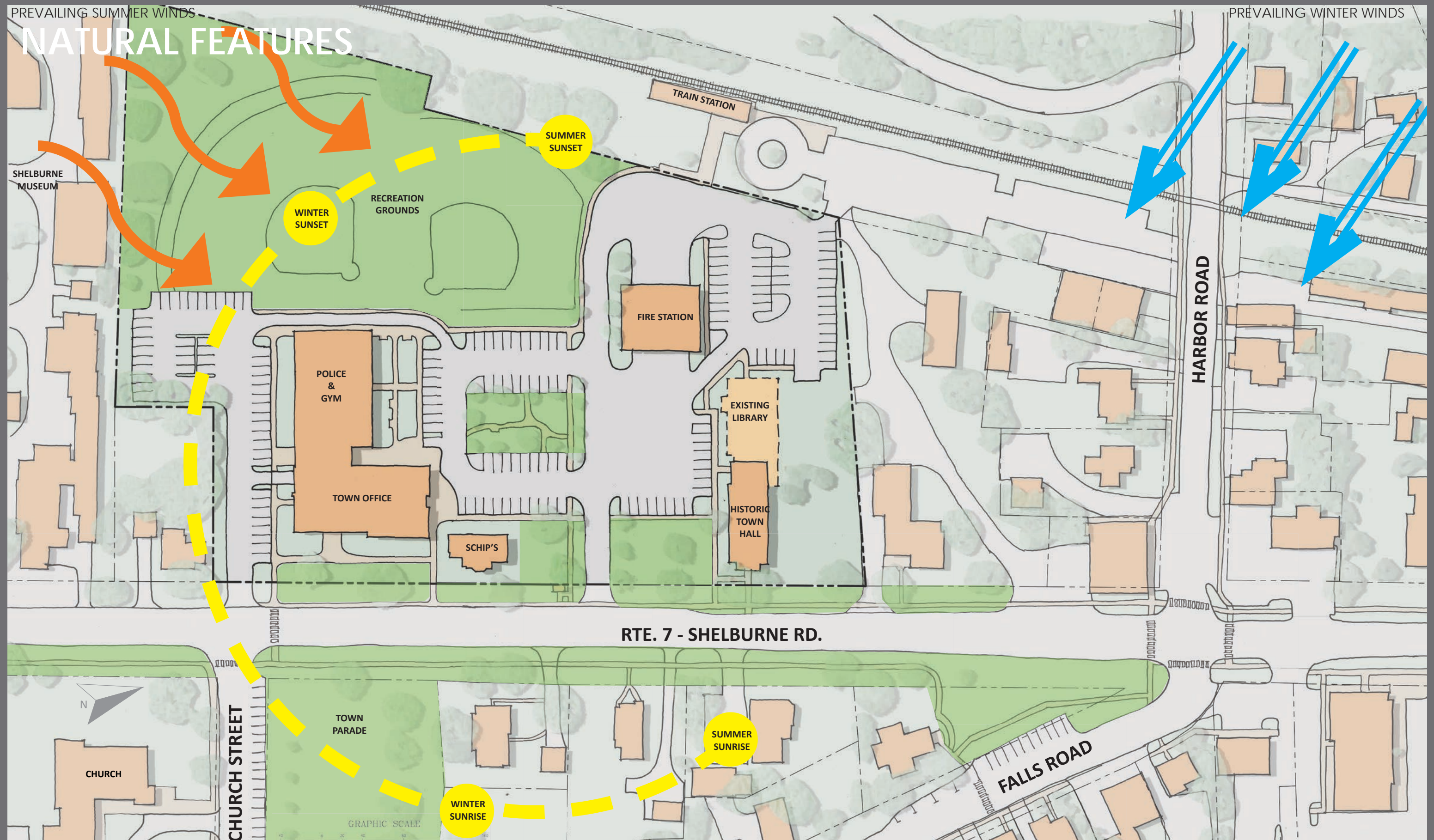
- Solid structure
- Historic significance
- Beautifully detailed public meeting space
- Poor lighting and acoustics
- Water infiltration into basement
- Water infiltration into roof and damage to ceiling
- Deferred maintenance
- Lacking energy efficiency



SITE CONTEXT

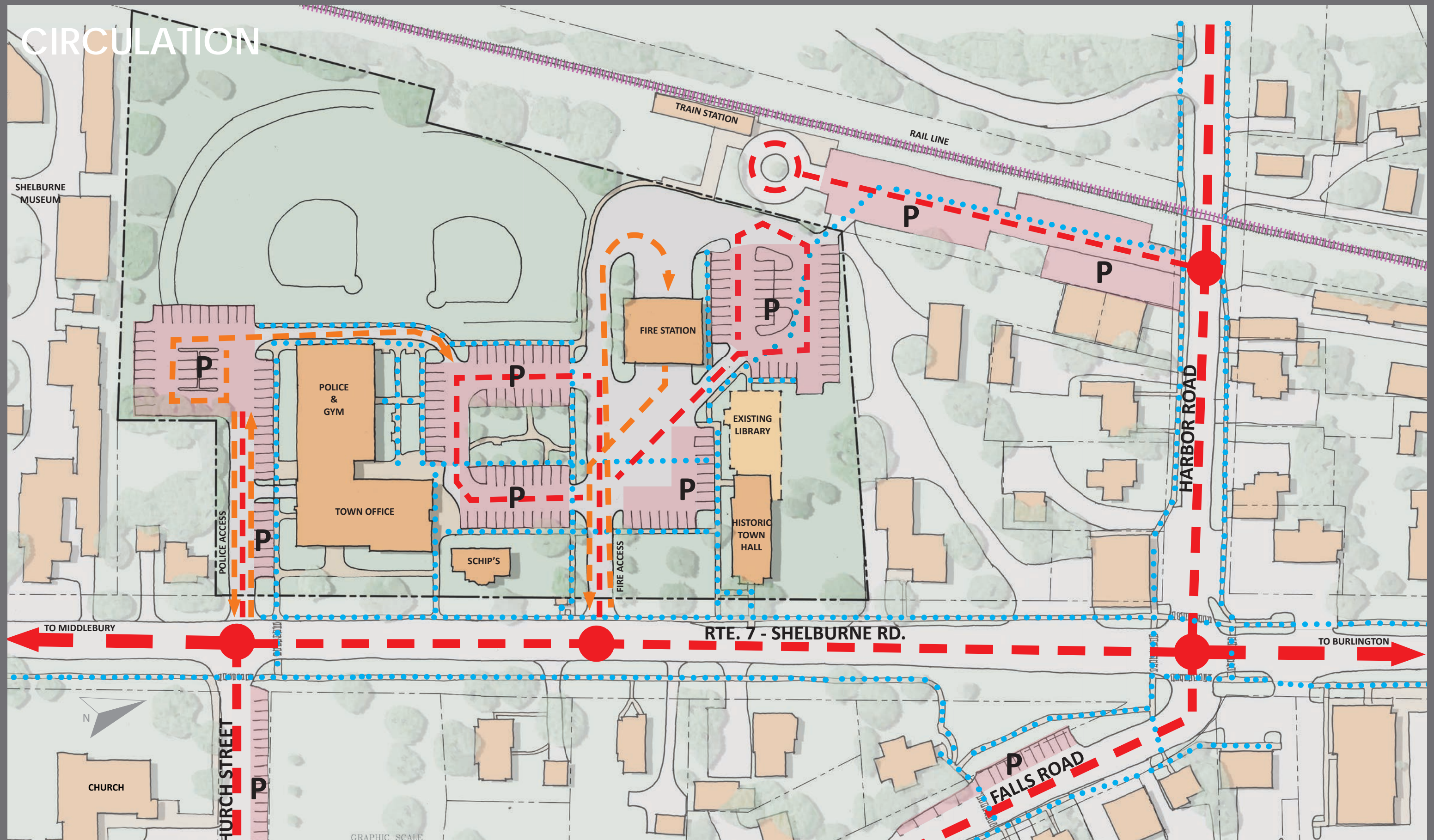


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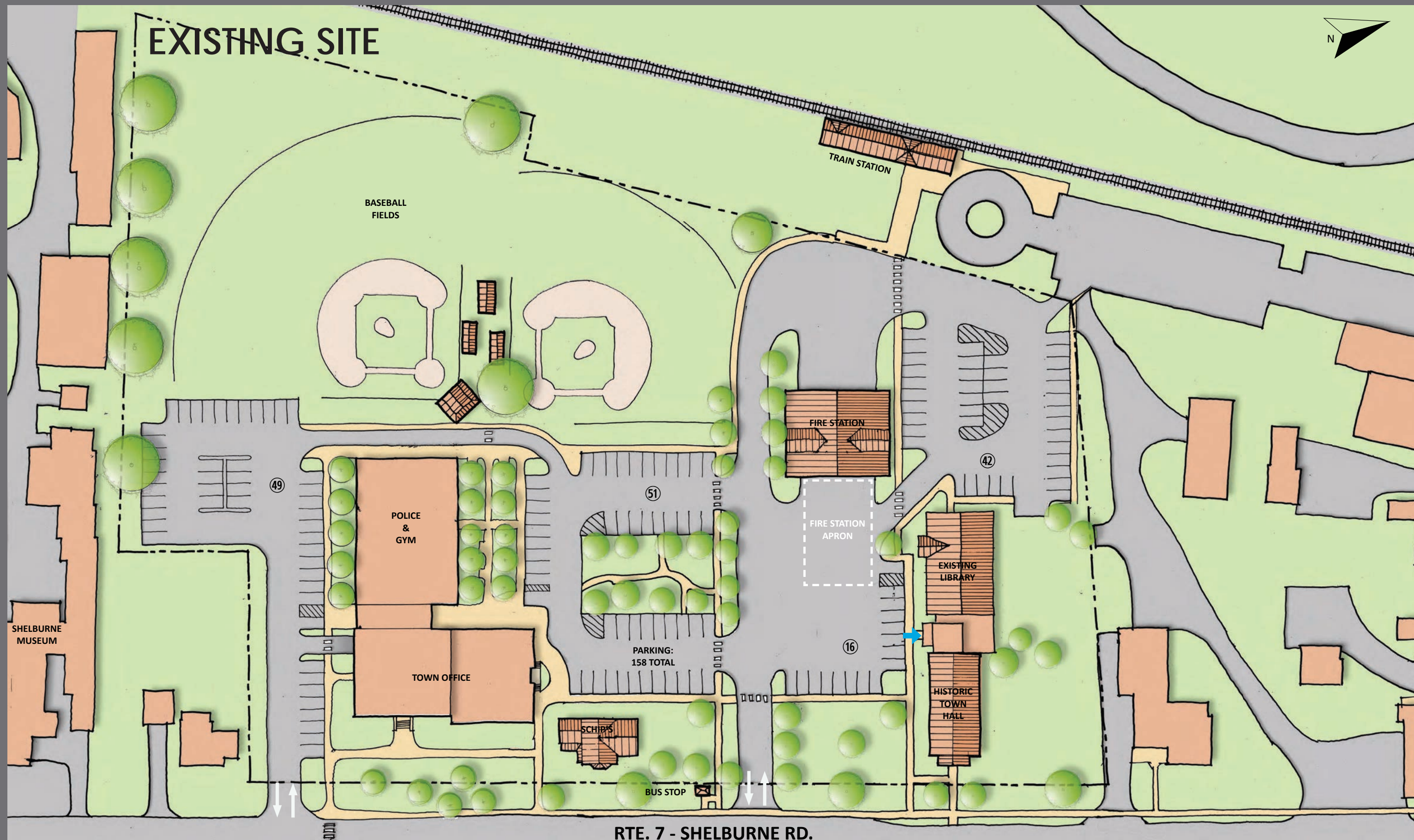


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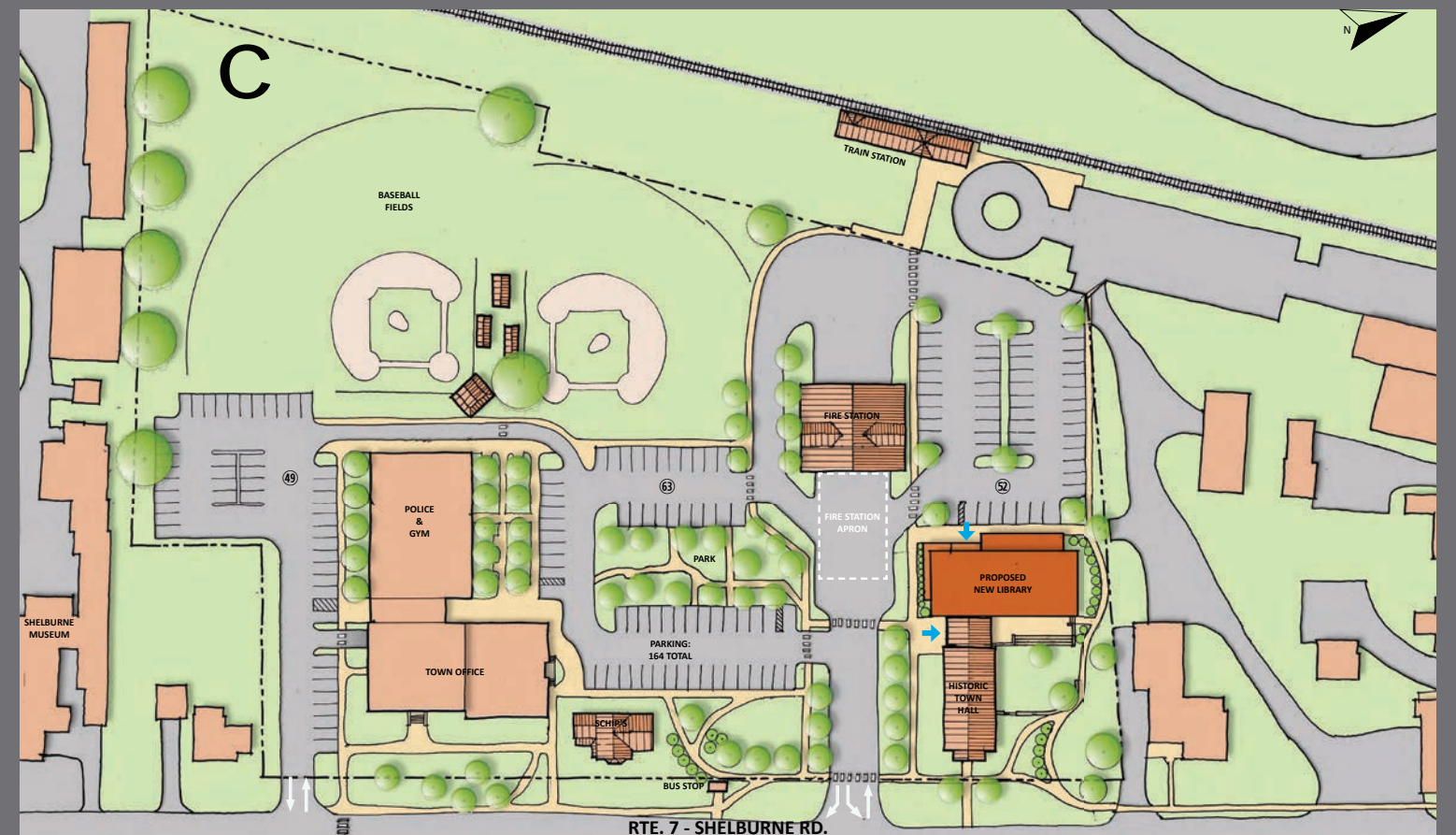
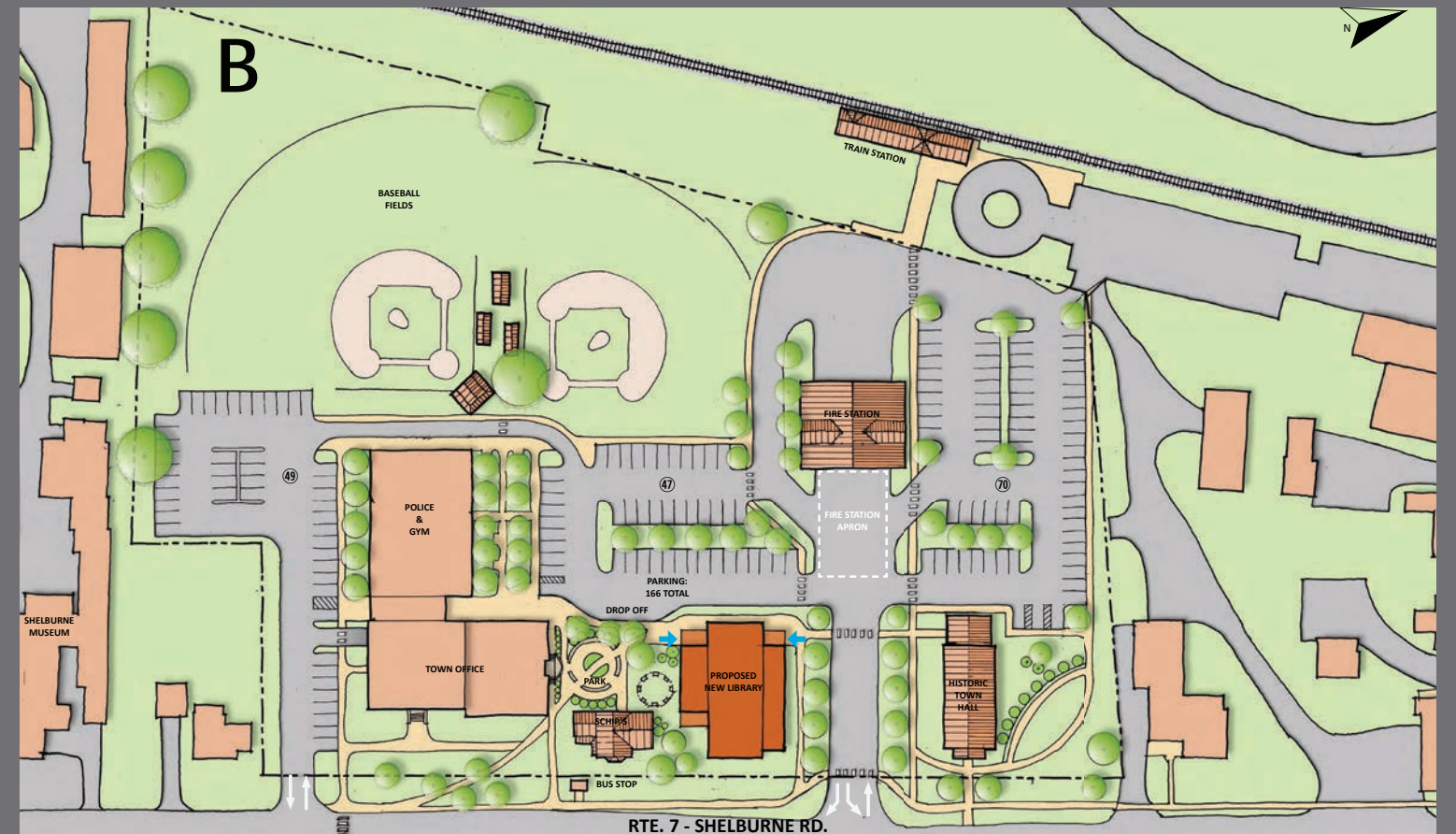
# CIRCULATION



## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



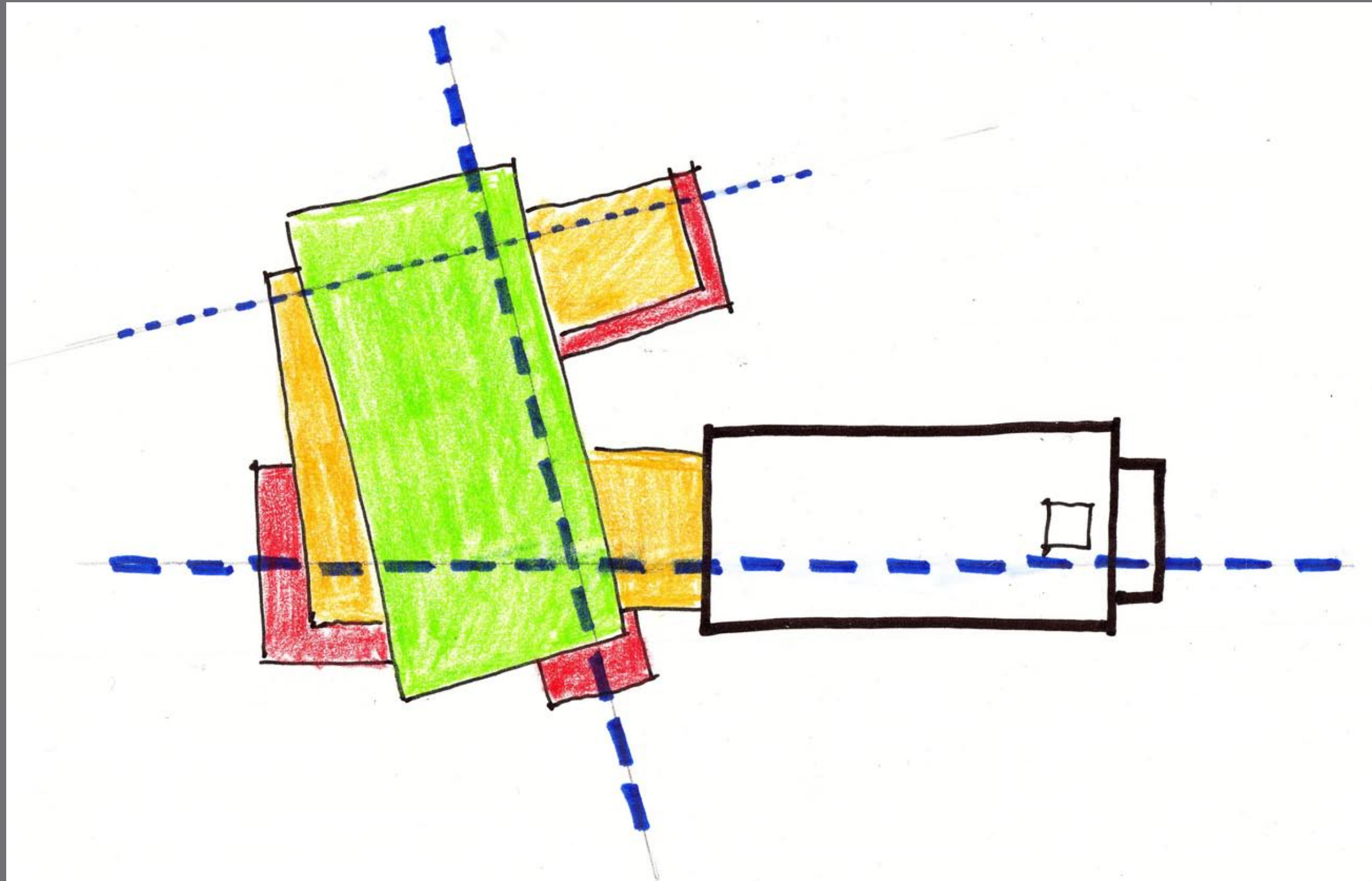
# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



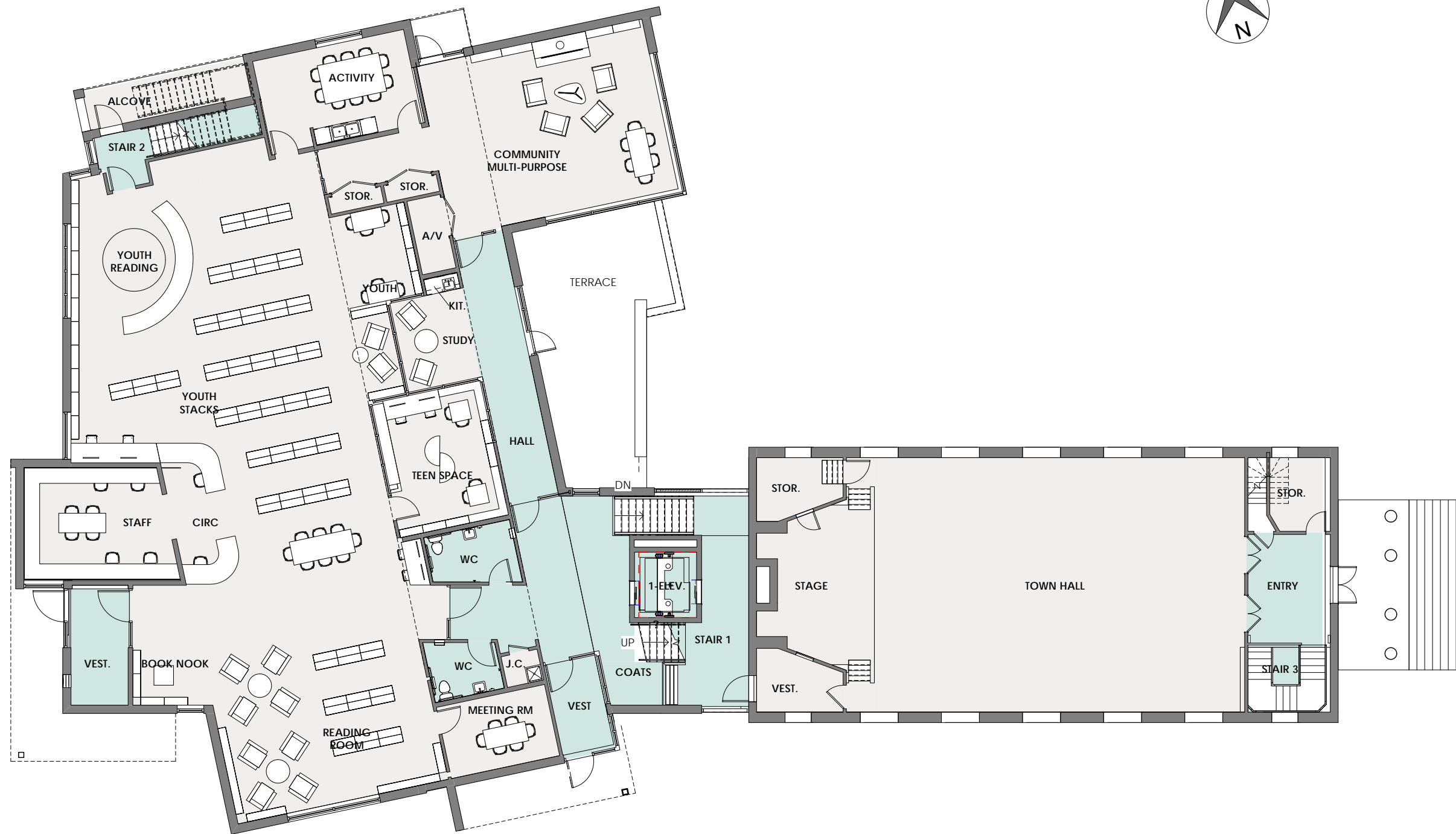
# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



# CONCEPT DIAGRAM



SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



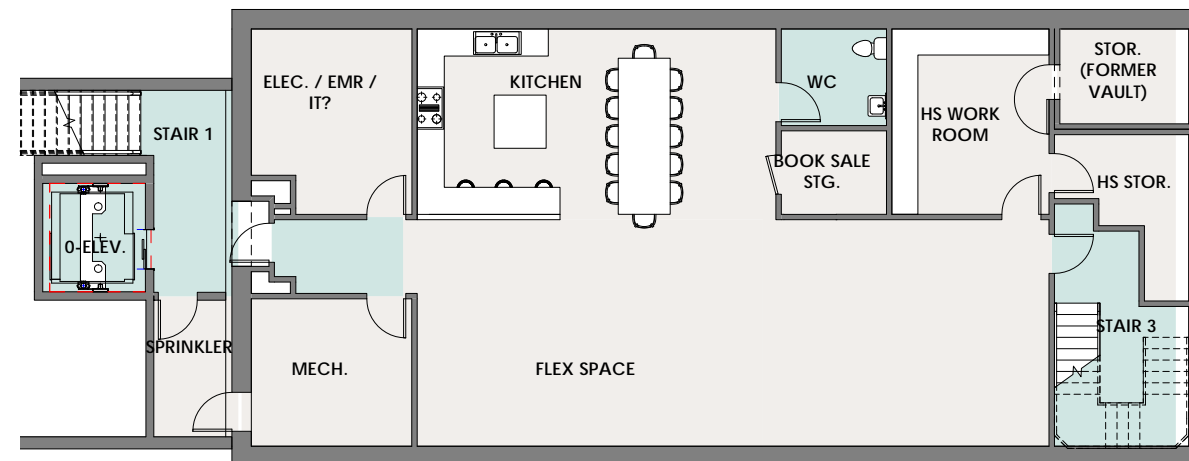
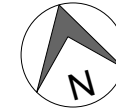
MAIN LEVEL FLOOR PLAN

# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



UPPER LEVEL FLOOR PLAN

# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



2 BASEMENT PRESENTATION PLAN  
1/8" = 1'-0"

## LOWER LEVEL FLOOR PLAN

# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL



SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

## KEY PROJECT FEATURES

- **New, energy-efficient, sustainably-designed** structure that is less expensive to operate and maintain;
- **Accessible, spacious library** that will last for generations;
- **Flexible library spaces** for quiet activity, community areas, and ground-level youth area;
- **Improved technology and business center**, including computers, printers, scanner, and well-equipped meeting rooms;
- **Architecture that emphasizes the importance of the library in our community** – is a beacon and welcome center for visitors;



## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

## KEY PROJECT FEATURES



- Much-needed renovations to our historic Town Hall inside and out, main and lower levels, including bathrooms, a kitchen, and space for other use such as the Historical Society;
- Designated paths for pedestrian and biker safety;
- Green space addressing campus stormwater in a natural way;
- Much-improved fire vehicle egress, including a left-turn exit lane; and
- Increased, better organized/allocated parking.

SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# SUSTAINABLE DESIGN FEATURES

- Net-Zero energy new construction (to be confirmed 1 yr. post occupancy);
- Energy efficiency upgrades to historic Town Hall;
- Natural stormwater treatment – rain gardens;
- Maximize solar exposure and daylight in building;
- Efficient mechanical systems;
- Water conservation; and
- Use of local materials and craftspeople.



SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# SUSTAINABLE DESIGN FEATURES

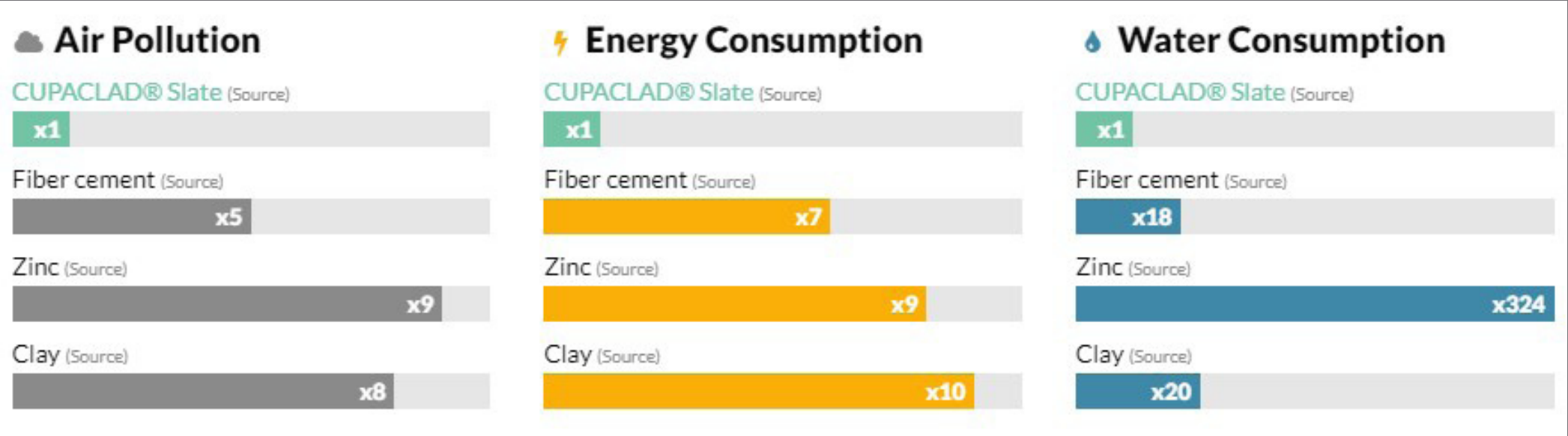
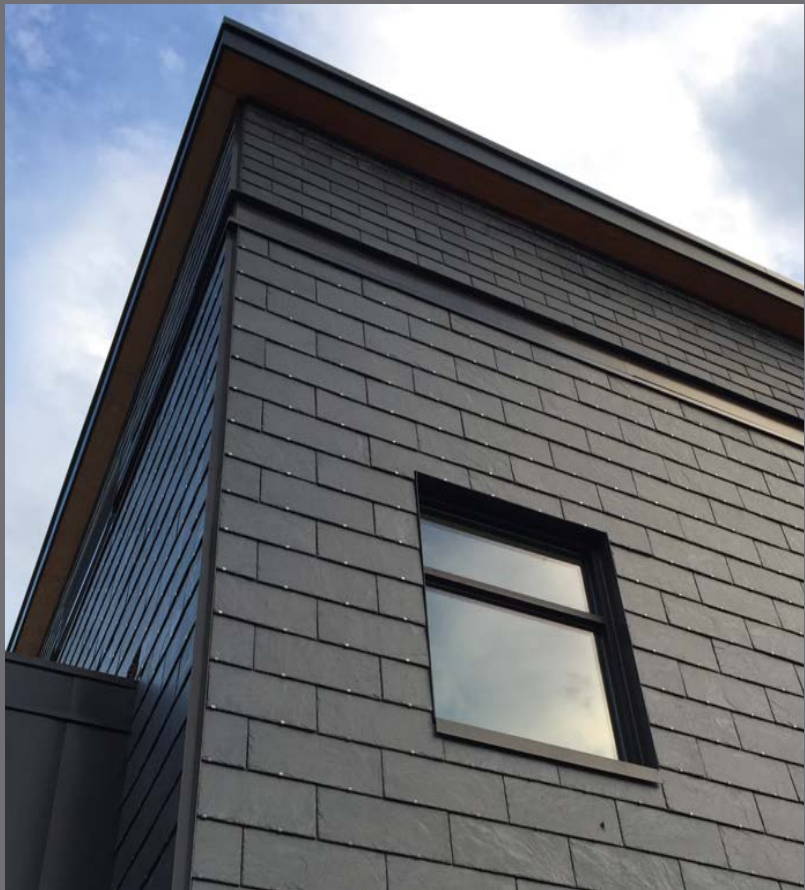
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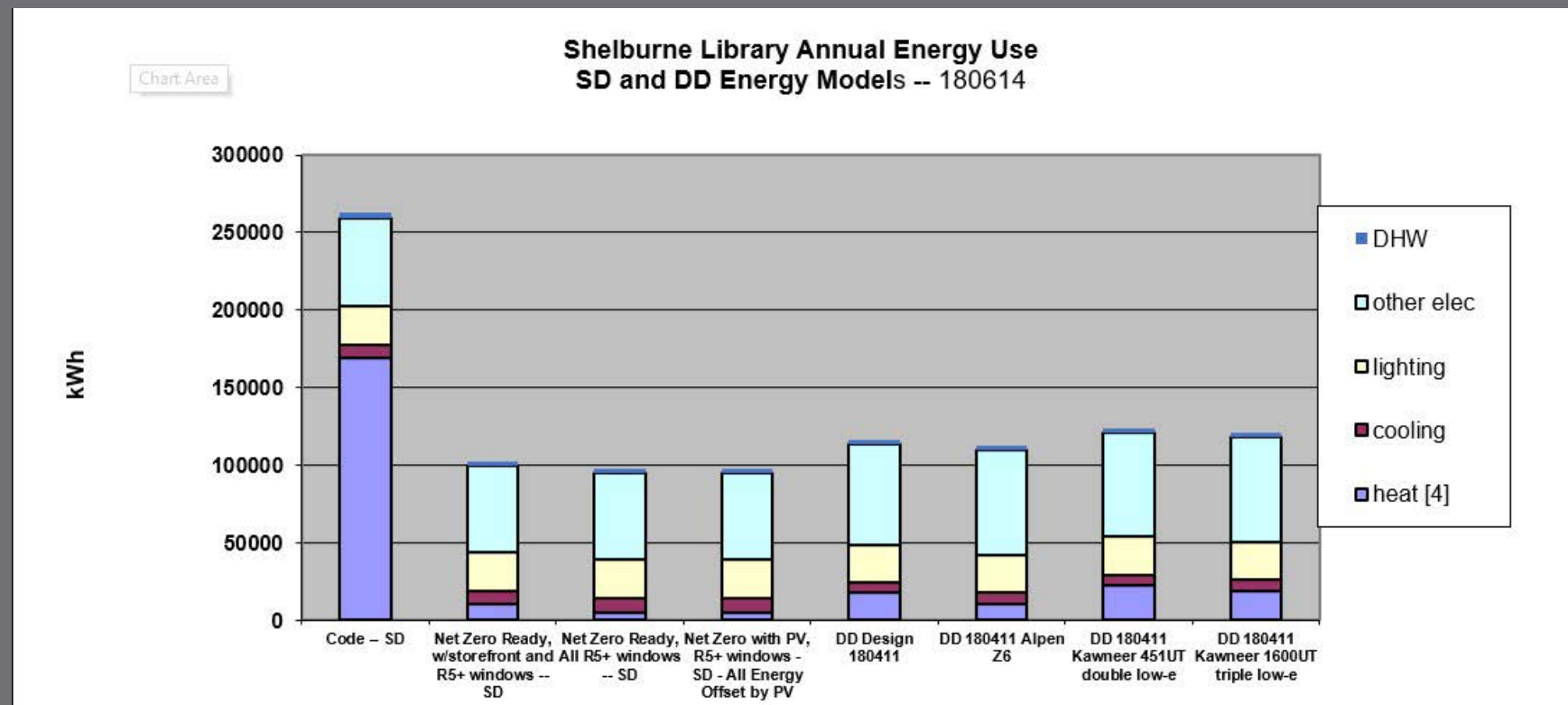
# MATERIAL DURABILITY & LONG-LIFE SOLUTIONS

- Low-Maintenance
- Long Life
- Durable
- Minimally Processed
- Affordable



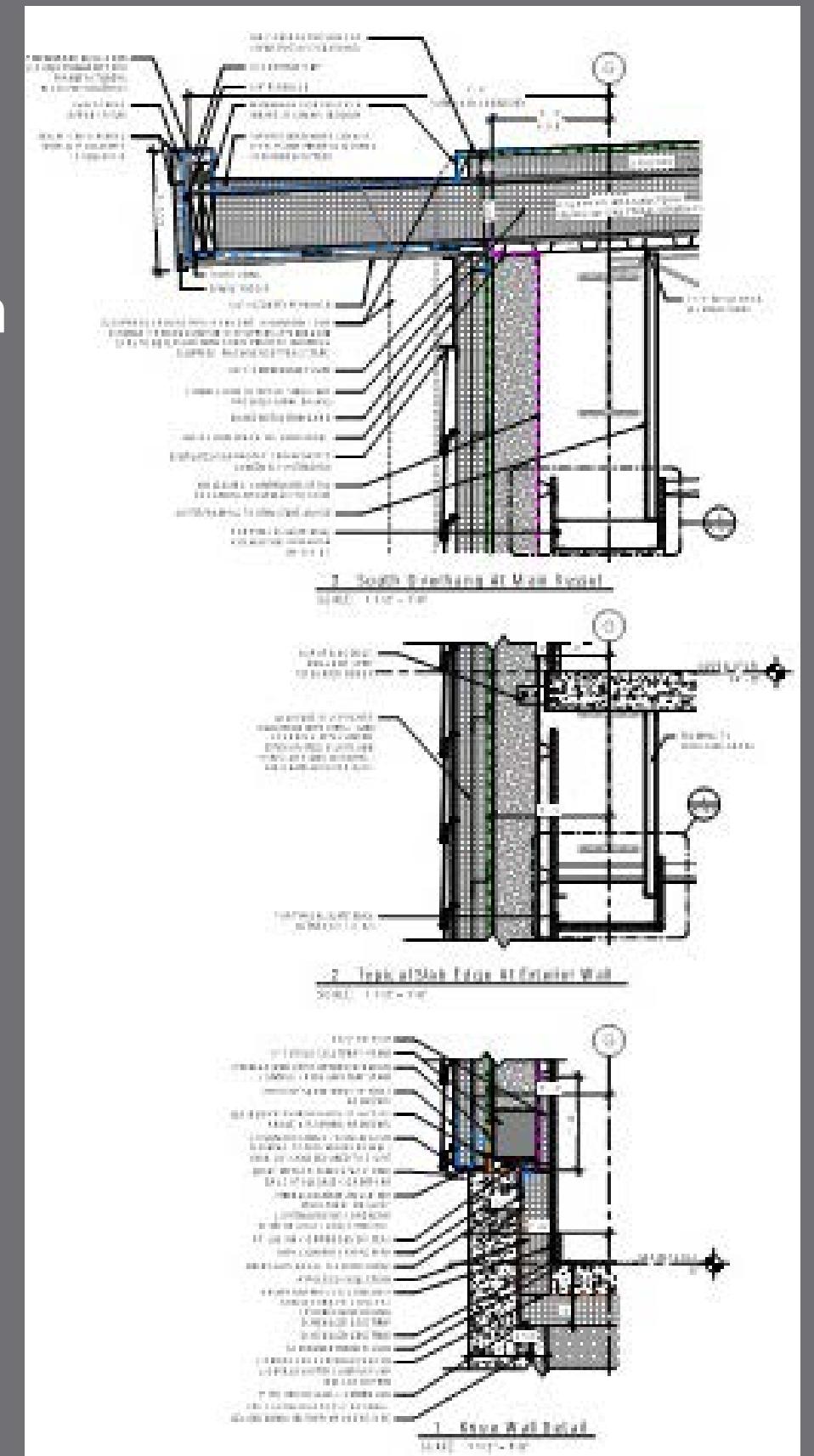
# ENVELOPE - PERFORMANCE

- Energy Modeling & Analysis
- Maximizing Value - Put the \$\$\$ where it makes the greatest impact!
- Minimize Complexity
- Minimize the use of environmentally unfriendly foams.



# ENVELOPE - KEY STRATEGIES & CONSIDERATIONS

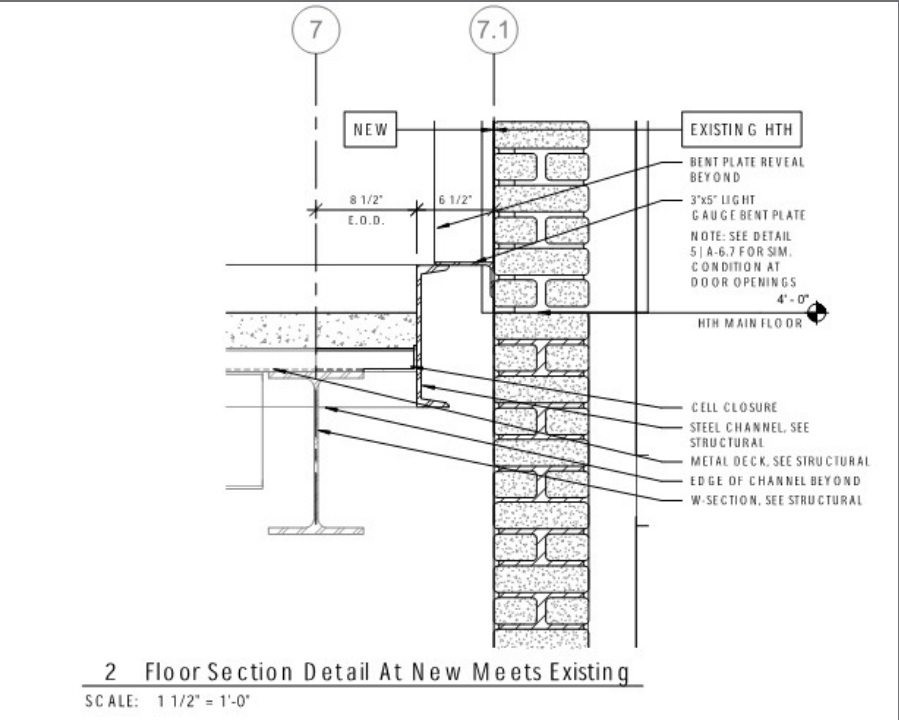
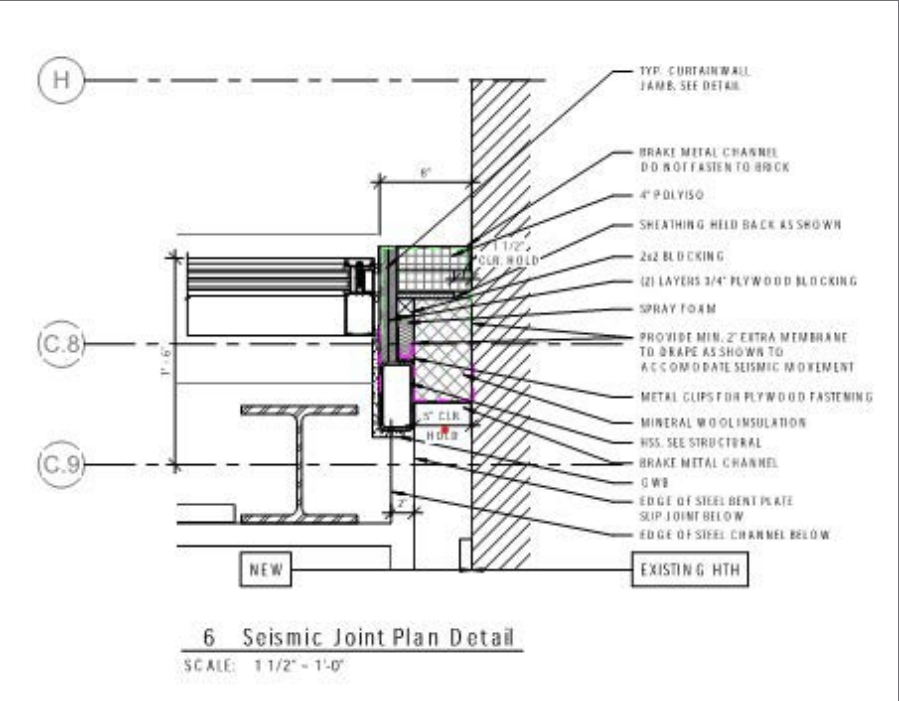
- Sequencing
- Testing & Mock-ups
- Attention to Detail, Training, and Clear Communication



# ENVELOPE - UNIQUE CONDITIONS

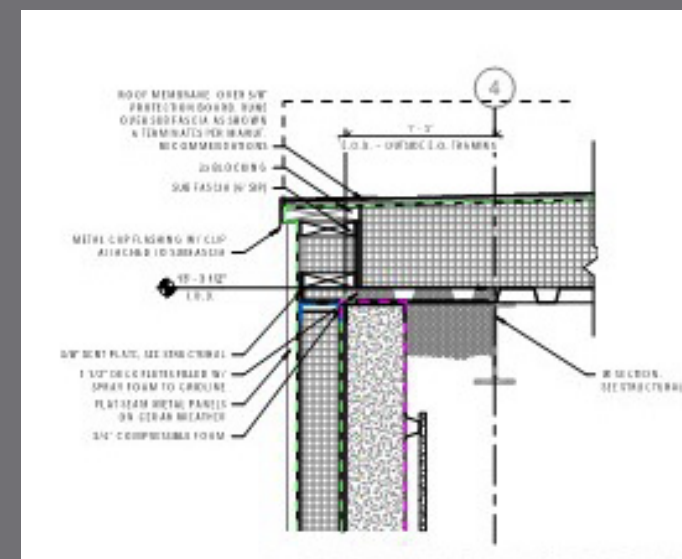
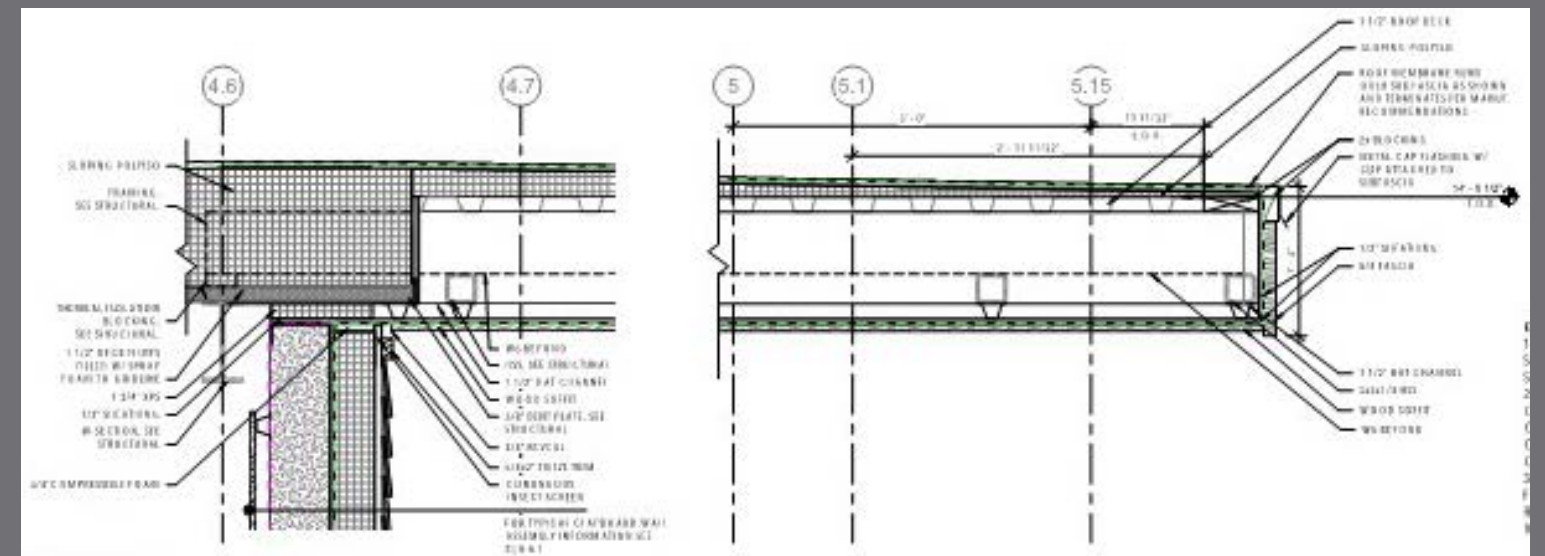
- Minimize (Isolate) Thermal Bridging
- Material Compatibility
- Steel & Moment Frame Isolation

Shelburne Public Library Materials Compatibility Matrix Roof System		06 1000 Rough Carpentry Wood PT Wood	05 1200 Structural Steel Framing Steel Steel	05 3100 Steel Decking Metal Decking Steel Roof Decking	07 2100.3C Structural Insulated Panel Roof System SIP EPS + OSB skin	07 2100.3B Rigid Board Insulation Insulation above roof decking Firestone Roof Insulation	22 0019 Plumbing Specialties Penetrations PVC Pipes	07 2500.3E Ext. Air Infiltration and Weather Barrier Sheathing CDX	07 2500.3F Weather Barrier Tape-On Plywood Tape Siga Wiglow	07 5100 Sheet Metal Roofing & Accessories Self-Adhering Sheet Underlayment Grace Ultra	07 3100 Slate Roof Repair & Cladding Self-Adhering Sheet Underlayment Grace Ice and Water	07 2100.3D Loose Fill Insulation - For Attics Cellulosic-Fiber Loose-Pack Igloo Cellulose	07 2100 Thermal Insulation Insulation above roof decking Extruded Polystyrene	07 2100 Closed Cell Spray Foam Spray Foam Foamsulate 220	05 5400 Cold Formed Metal Framing Wall System Galvanized Steel (2-Girts, Studs, etc.)	07 2500.3J Ventilated Underlayment Roof System Cedar Weather	07 5423 Thermoplastic Polyolefin (TPO) Roofing TPO Membrane TPO Membrane	06 2013 Exterior Finish Carpentry Fascia 5/4 Fascia	06 2013 Exterior Finish Carpentry Exterior Wood at Eaves 3/4" T&G Clear Fir Soffits/Eaves	06 2013 Exterior Finish Carpentry Sheet Goods at Eaves and Soffits Clear Fir Plywood	07 4200 Standing and Flat Seam Metal Roofing Metal Roofing & Siding 24 Ga. Aluminum-Zinc Alloy-Coated Steel Sheet
Fenestration																					
06 1000 Rough Carpentry	Wood PT Wood		NC	NC	NC	NC	NC	NC									NC				
05 1200 Structural Steel Framing	Steel Steel			NC	NC	NC	NC	NC													
05 3100 Steel Decking	Metal Decking Steel Roof Decking					NC	NC	NC													
07 2100.3C Structural Insulated Panel	Roof System SIP EPS + OSB skin						NC	NC													
07 2100.3B Rigid Board Insulation	Insulation above roof decking Firestone Roof Insulation						NC	NC													
22 0019 Plumbing Specialties	Penetrations PVC Pipes							NC													
07 2500.3E Ext. Air Infiltration and Weather Barrier	Sheathing CDX																				
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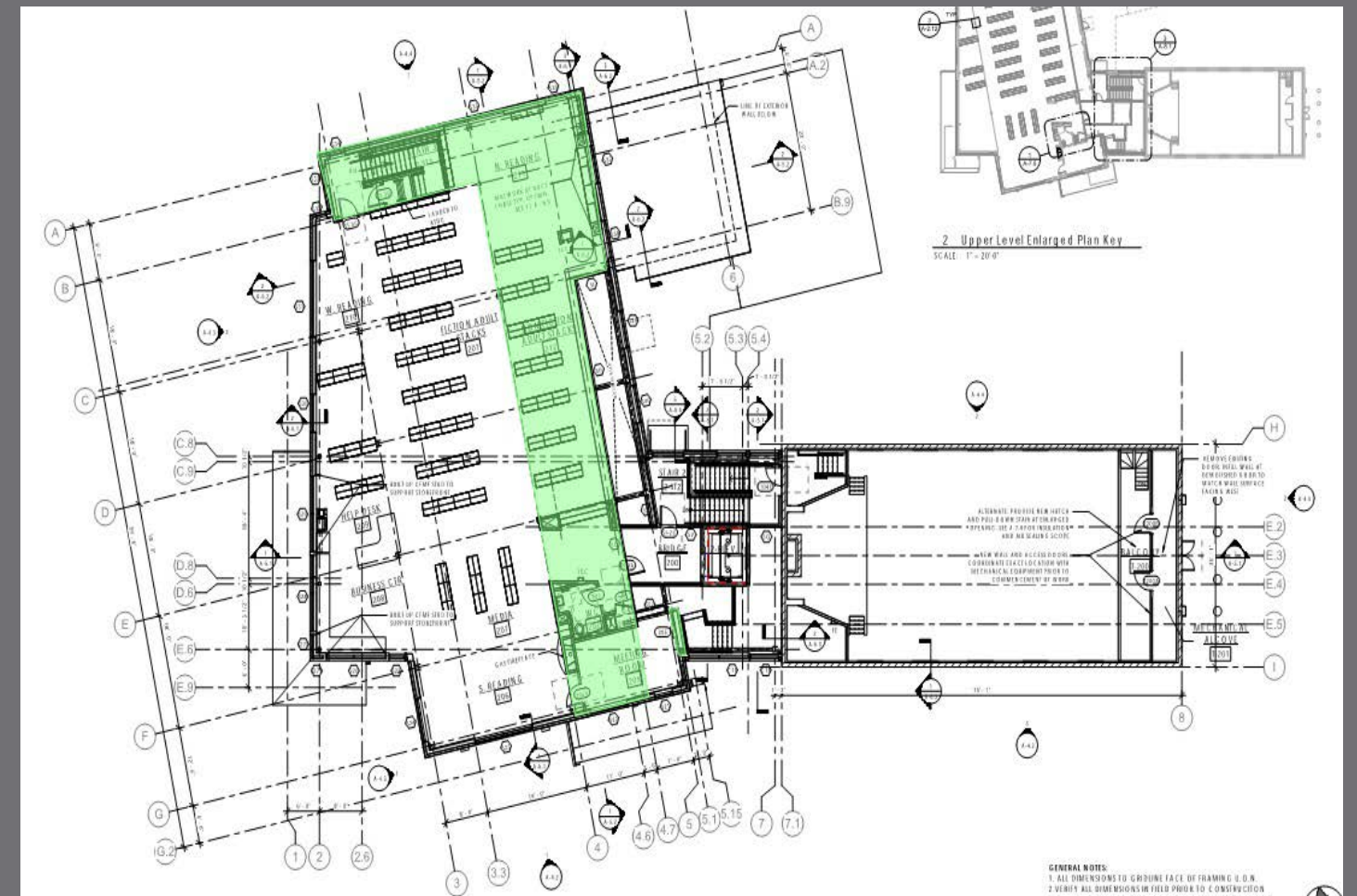
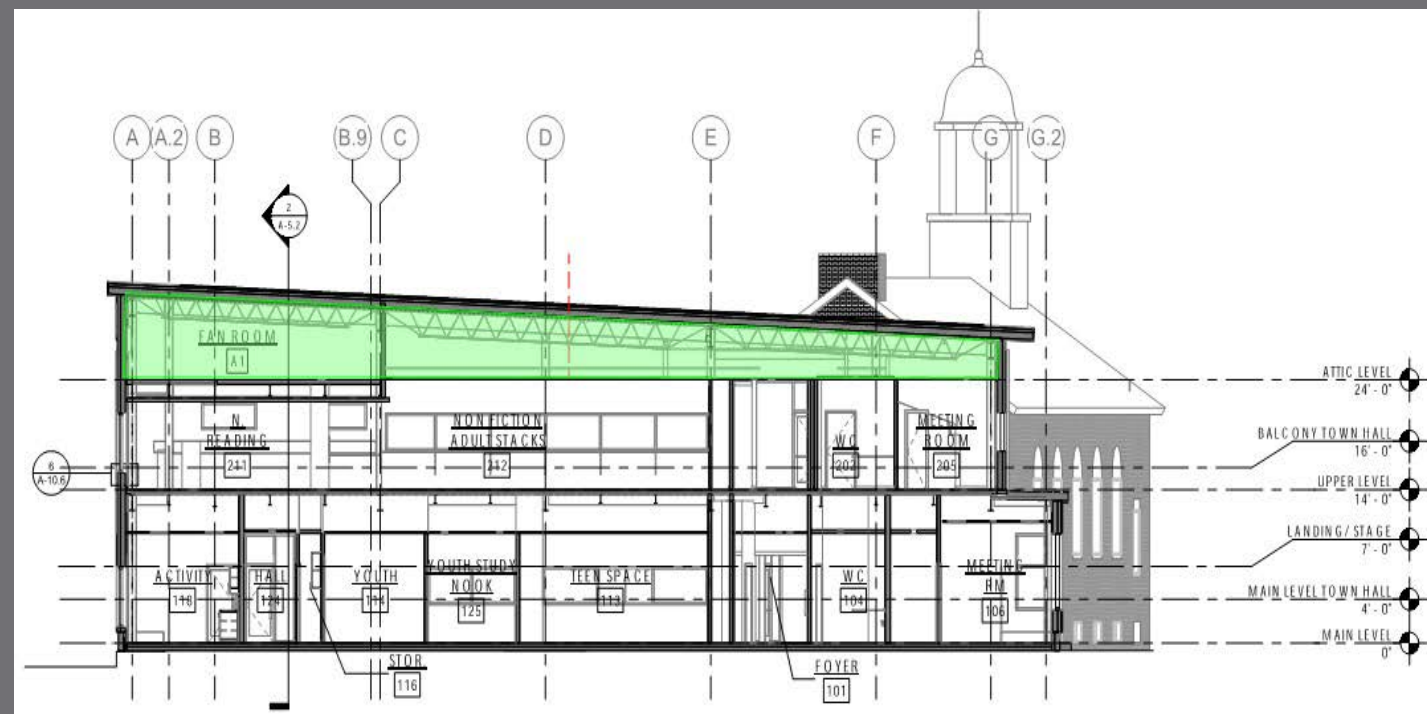
- Minimize (Isolate) Thermal Bridging
- Material Compatibility
- Steel & Moment Frame Isolation



# SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# INTEGRATED SYSTEMS

- Mechanical Spine



## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL

# QUESTIONS AND COMMENTS



## SHELBURNE PIERSON LIBRARY & HISTORIC TOWN HALL