

Monroe Masonic Temple Study Progress Review



Architectural – Structural Assessment

Exterior

Cracking on West (Monroe St) façade and at Northeast Corner.
Deteriorated porch slab and columns. Missing downspouts.
Balcony structure can support 75 psf live load.



Recommendations:

- Repoint areas of cracking.
- Monitor for future movement.
- Replace porch slab.
- Rebuild porch columns, reinforce beam for balcony.

Architectural – Structural Assessment

Roof

Slate is in good condition. Gutters have some replaced sections. Parapet walls need maintenance.



Recommendations:

Repairs, replacement of roof and flashing on areas behind parapet walls.

Repointing parapet walls.

Survey with lift for extent of gutter replacement and condition behind parapet walls.

Architectural – Structural Assessment

Ground Level



Recommendations:

Repoint all cracked masonry and monitor for re-cracking.

Expose column in area of masonry cracking, inspect and repair if required.

Inspect under slab piping system, top current slab on grade to level surface.

Monitor slab by west interior bearing wall for re-cracking.

Header and reinforce joists damaged for access to plumbing pipes.

Reinforce beams in west ancillary space.

Soil boring to confirm soil bearing capacity.

Architectural – Structural Assessment

First Floor



Recommendations:

Remove/repair damaged plaster finishes, inspect masonry and structure behind.

Limit live load in east and west ancillary rooms to 100psf.

Limit live load in main space to 125psf.

Investigate stage framing to verify load capacity, reinforce if required.

Architectural – Structural Assessment

Second Floor



Recommendations:

Repair roof to stop water infiltration.

Remove/repair damaged plaster finishes, inspecting the masonry and structure behind.

Reconfigure restroom to meet ADA to allow this space to be used independently of other two floors.

Environmental Assessment – asbestos

Category 1, friable, was identified associated with pipe insulation and fittings

Category 2, non-friable, was identified mostly related to flooring

Some items not tested but presumed to contain asbestos were identified

HA. NO.	MATERIAL	LOCATION	ESTIMATED QUANTITY
1	12" x 12" Floor Tile-Beige	Basement	20 ft ²
3	9" x 9" Floor Tile- Pink with streaks	Basement	225 ft ²
4	9" x 9" Floor Tile- Light Gray	Basement	225 ft ²
6	Pipe Insulation	Throughout	1,000 linear ft
7	Pipe Fittings	Throughout	150 fittings
8	Mastic under 12" x 12" Gold Floor Tile	Basement and 1 st floor Elevator Lobby	140 ft ²
11	12" x 12" Floor Tile-Red	Basement Large Room	50 ft ²
19	12" x 24" Floor Tile-Brown	Front Stairway	200 ft ²
20	12" x 24" Floor Tile-Black	Front Stairway	60 ft ²
21	6" x 6" Floor Tile-Black	Front Stairway	250 ft ²
22	6" x 6" Floor Tile-Brown	Front Stairway	250 ft ²
27	12" x 12" Floor Tile- Light Gray with Streaks	Attic Room	450 ft ²
28	Transite	Attic	3,000 ft ²
34	Coal Chute Caulk	2 nd Floor Elevator Lobby	20 linear ft

Recommendations:

Proper removal/disposal by licensed abatement contractor, if area is being renovated

Further testing on some tile and other items, if they are to be removed

Mechanical Recommendations

Remove existing mechanical systems

Replace with

- Two high efficiency gas fired condensing boilers will supply hot water to air handling unit heating coils, terminal unit tempering coils, and perimeter heating equipment.
- 10,000 CFM AHU for lower two floors
- 5,000 CFM AHU for top floor
- gas fired high efficiency domestic hot water heater.
- Simple DDC controls

Electrical Service

- new service with switchboard in the basement
- new lighting to meet current code light levels

Fire Protection

- install a fire alarm system

Energy Model

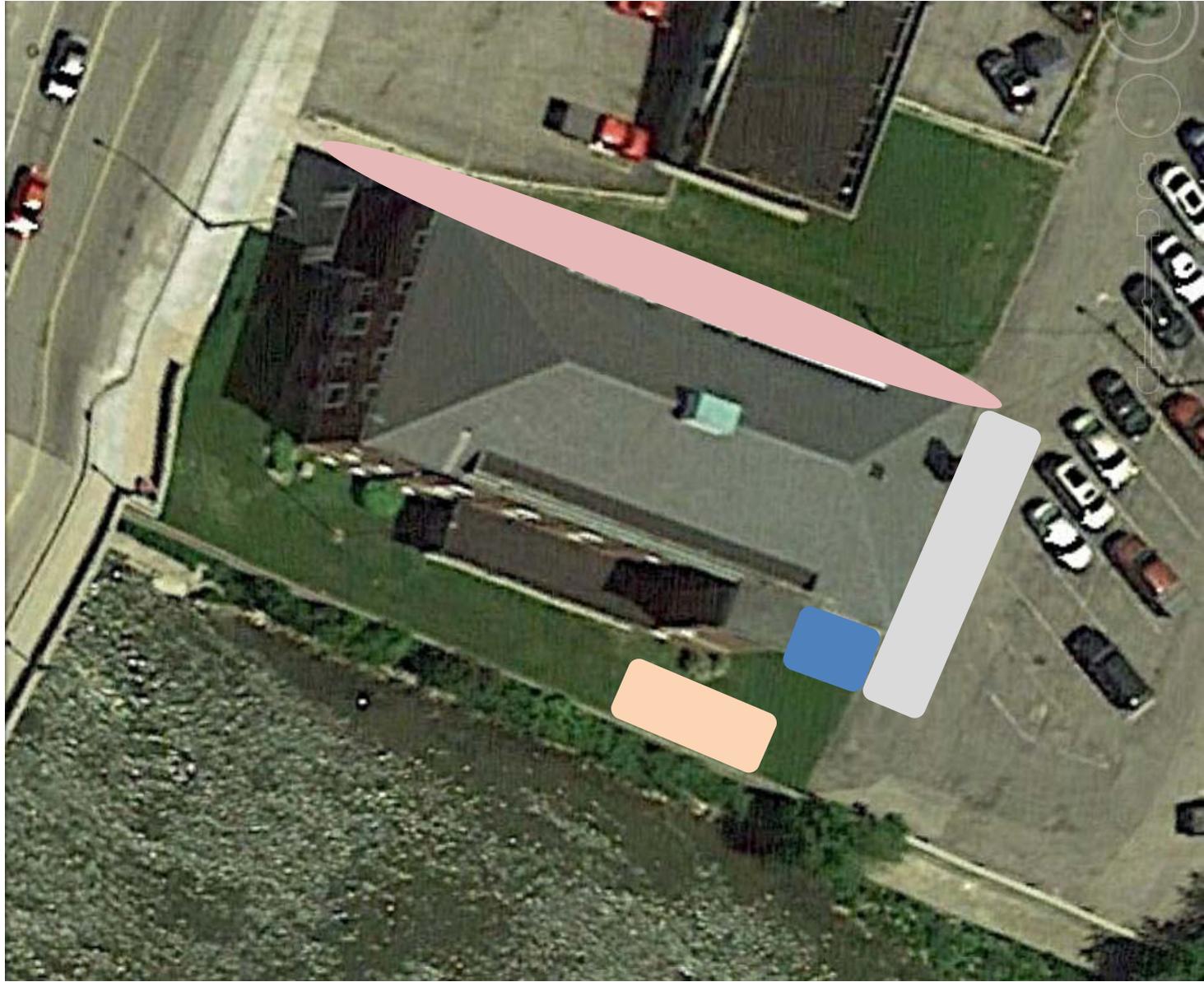
Based on the recommendations an energy model of the building was created.

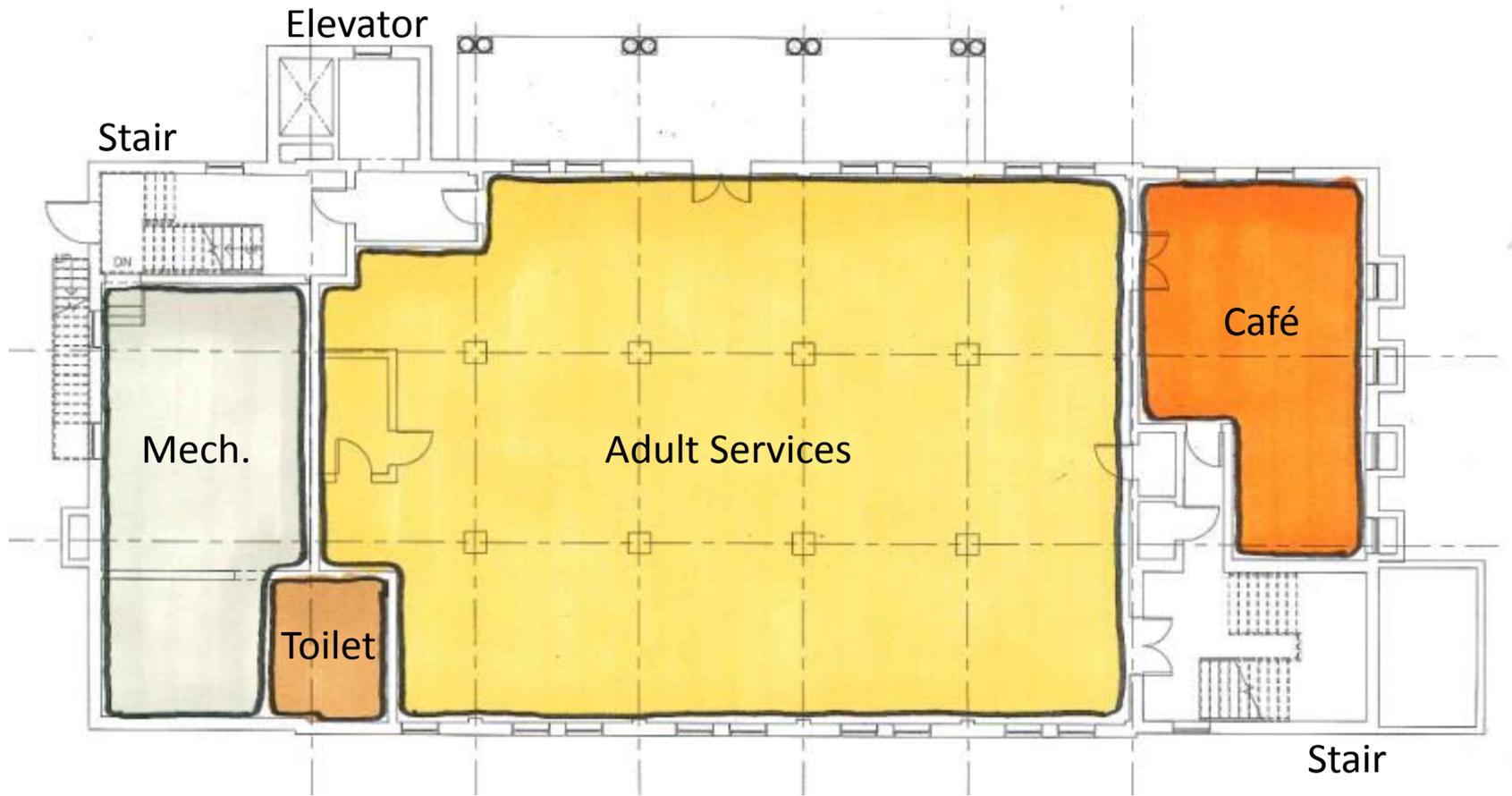
Annual Estimated Energy Cost and Consumption by Energy Type

Electric	162,346 kWh	\$12,988
Natural Gas	8,928 Therm	\$ 6,066
Total		\$19,054

Site Considerations

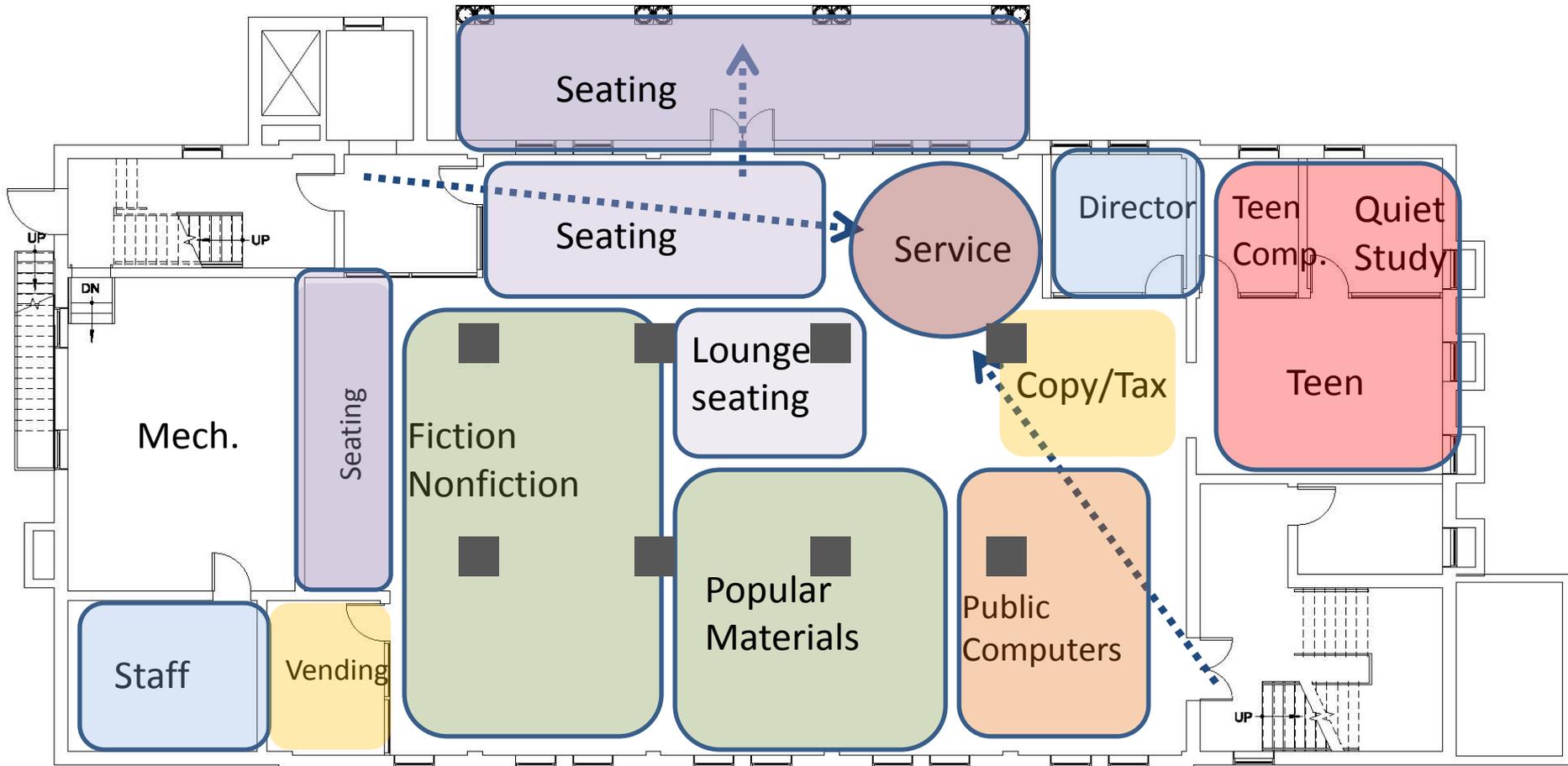
- North ramp
- Entry vestibule
- Riverside Patio
- Walk at east entry
- Site lighting
- Signage
- Landscaping
- Site furnishings





Ground Floor Planning Diagram

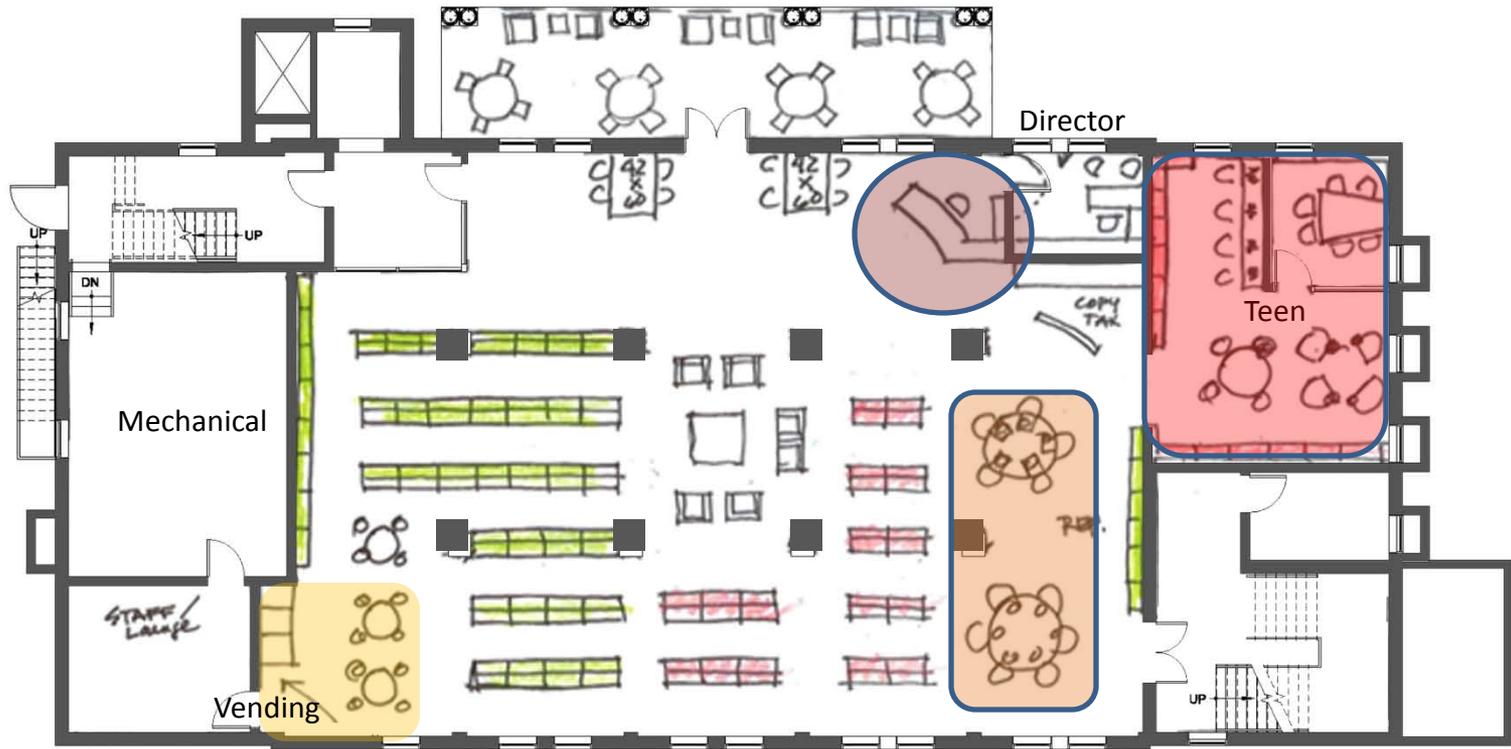




Teen
 Adult Services
 Magazines
 Fiction Non Fiction
 Copy Center

Staff Break Room
 Director's Office
 Cafe

Ground Floor



84" HIGH
FICTION/NF

Program 79
Drawn 80

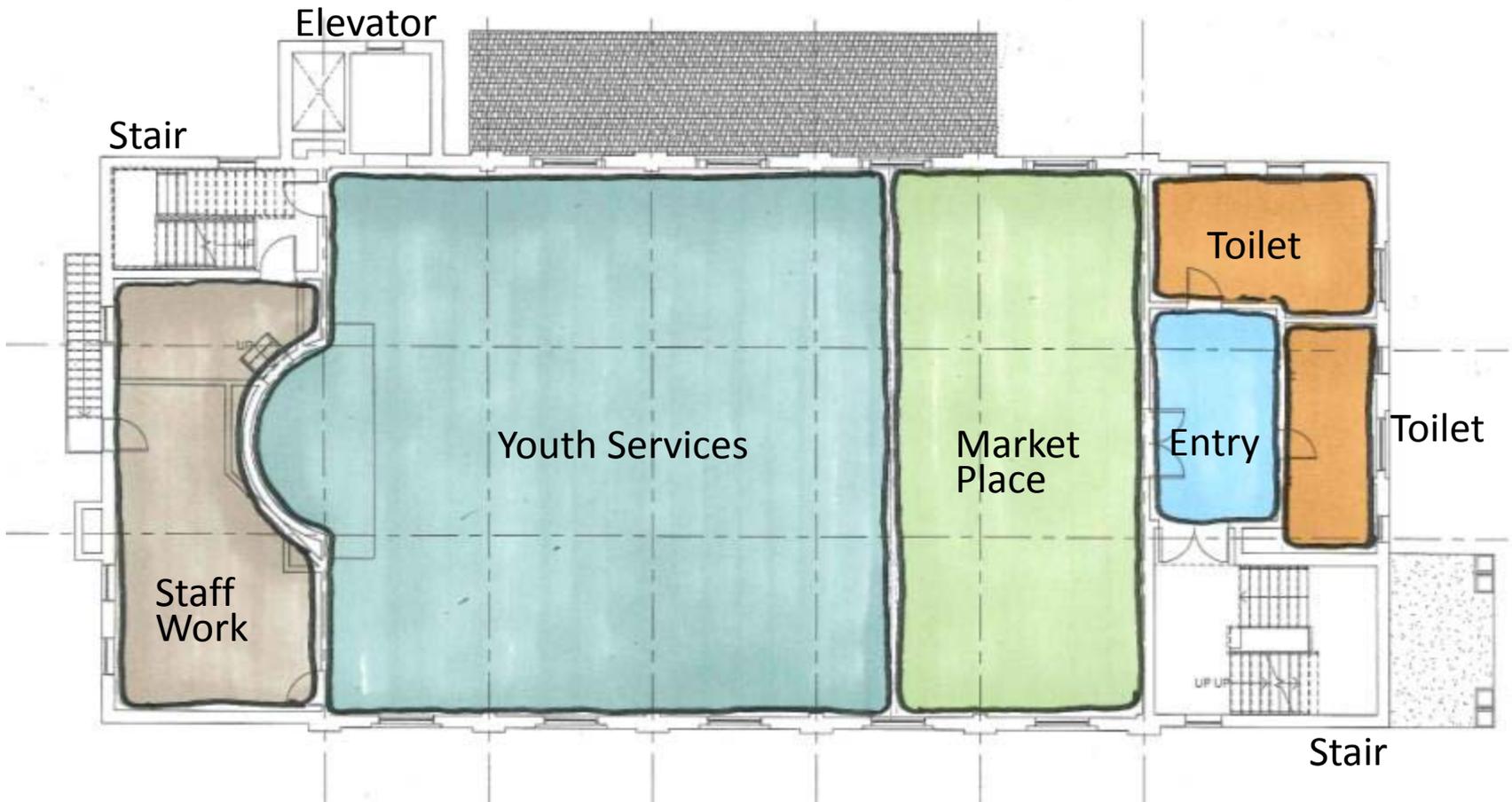
66" HIGH
LOCAL HISTORY
BIOGRAPHY
DVD
LG. PRINT
MAGAZINE
MICH

Program 28
Drawn 32

48"
REFERENCE

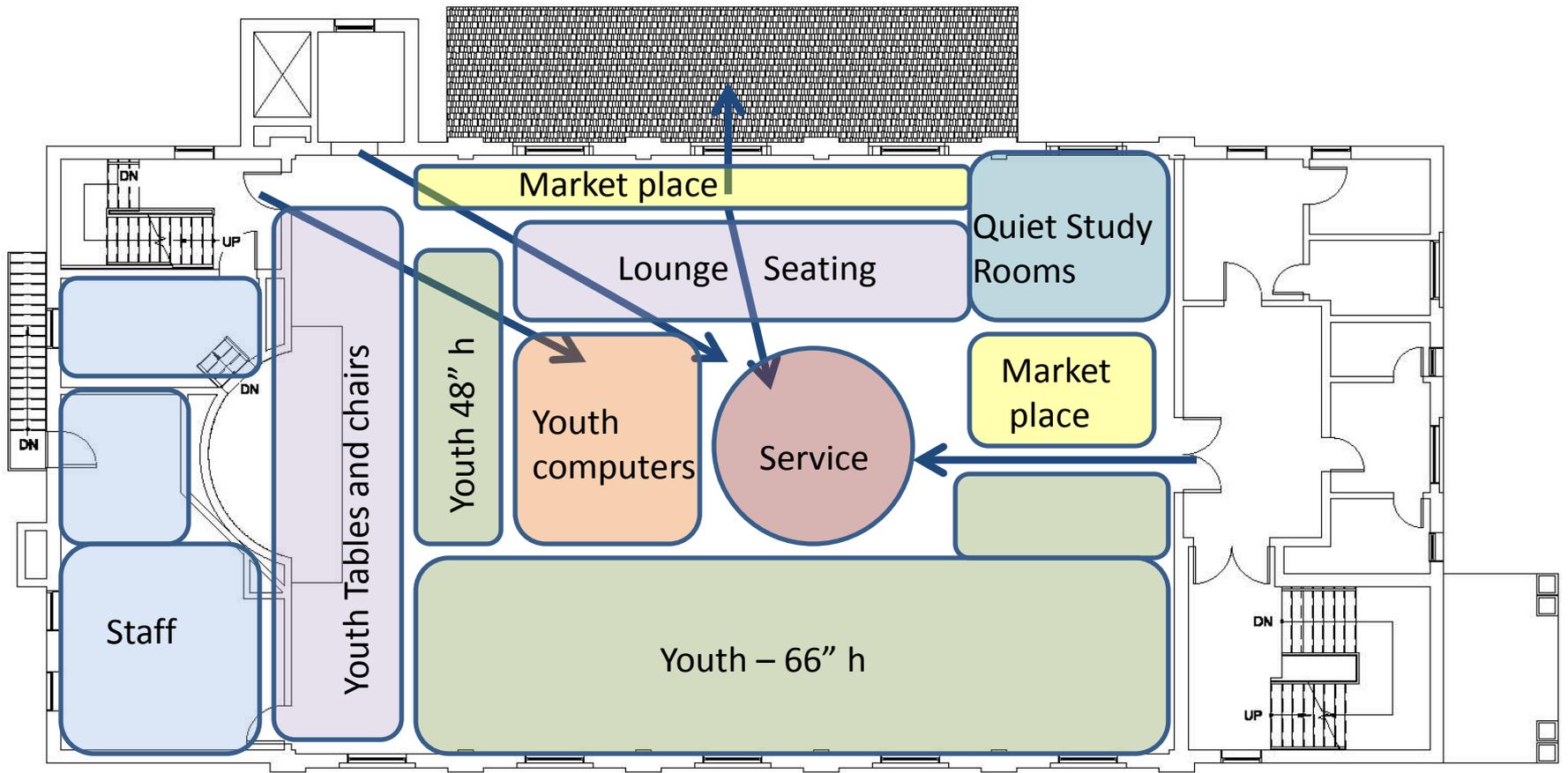
Program 6
Drawn

Ground Floor

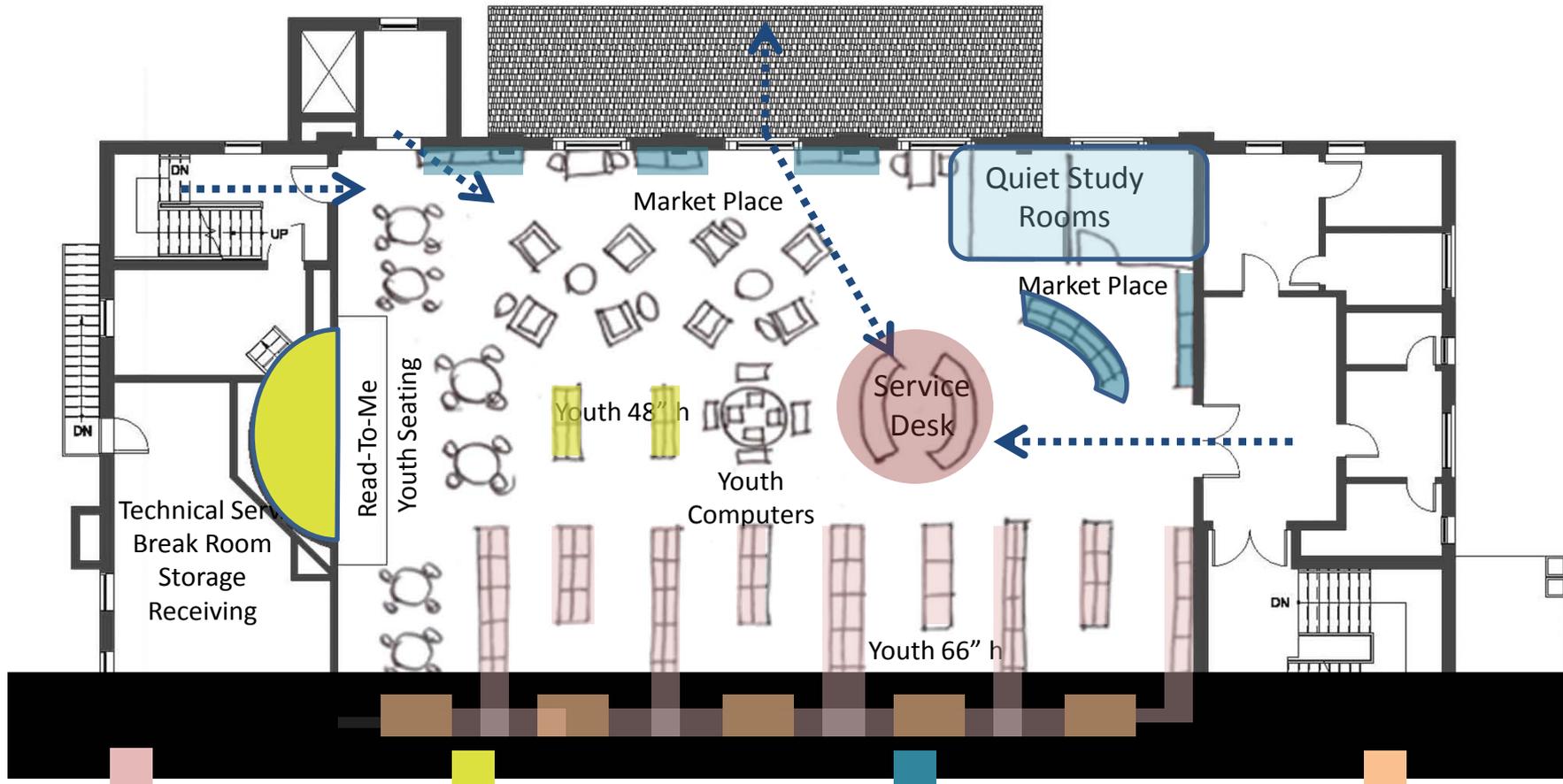


First Floor Planning Diagram





First Floor



66" HIGH

J Books
J Bios
Fiction
Nonfiction
Holiday
CD's
DVD's

Program 28
Drawn 32

48"

Easy Readers
E. Fiction, nonfiction
Kits
Board Books

Program 43

66" HIGH

Media – CD, DVD
New Books
New Fiction
New Non fiction

Program 24
Drawn 18

Window seats
typ.

First Floor

Total Project Cost

Includes:

- Site work, as noted on prior slide
- Architectural renovations to support library use
- Repairs to building envelope (roof, walls)
- Structural repairs
- New HVAC to support library use
- New electrical to support HVAC and library use
- Fixtures, Furnishings, and Equipment to support library use
- Hazardous Materials remediation
- Contractor General Conditions/OH&P
- Scope Development Contingency

Does not include:

- Purchase of building
- Property Survey
- Parking Lot repaving
- Technology Equipment
- Moving into library

An Escalation Factor of 3% is included for Spring 2016 construction start

Construction Estimate

Repairs & Maintenance	\$373,039
includes abatement and fire alarm	

Site Work	\$274,040
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Renovation	
Architectural	\$537,924
Mechanical/Plumbing	\$713,678
Electrical	\$389,109
FFE	\$454,140

TOTAL	(Cost per NSF \$176)	\$2,741,941
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Construction Total	\$2,741,941
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A/E Professional Fees	\$274,194
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Bonding & Permitting	\$41,129
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Owner Contingency	\$274,194
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TOTAL PROJECT COST	\$3,331,458
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Cost per NSF \$214

Reinforce 1st Floor to 150lbs/sqft	\$458,780
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Site Patio	\$15,856
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Porch Deck at 1st Floor	\$104,275
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Railing at West Entry	\$22,039
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Entry Vestibule Addition	\$47,567
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Technology Equipment	???
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Fundraising Opportunities

- Entry Vestibule
- Riverside Patio
- Riverside Deck on Porch
- Study Rooms
- 1st Level Read to Me Stage
- 2nd Floor Meeting Hall
- Exterior Restoration
- Furniture & Furnishings
- Children's Activity Center, 2nd floor