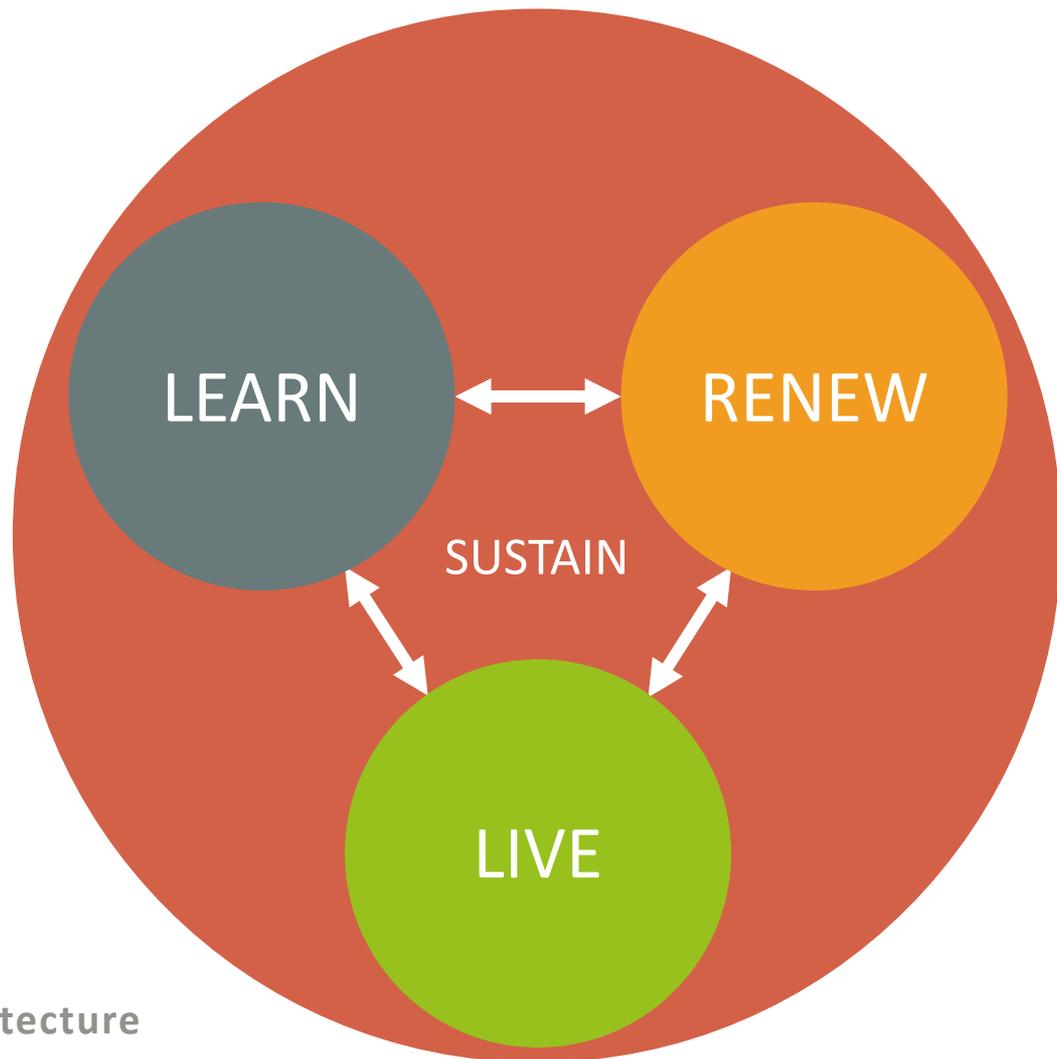


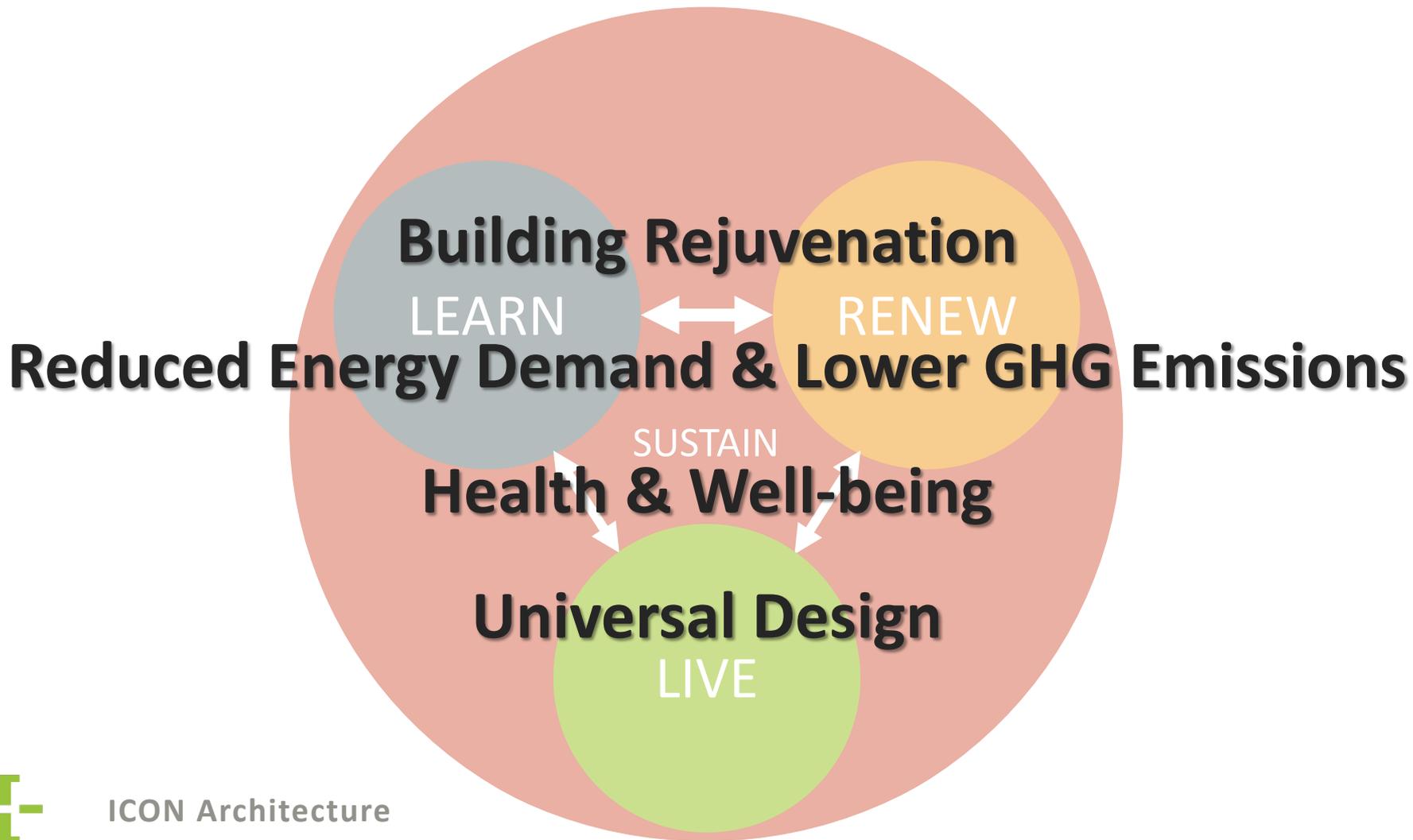


FAIRBANK COMMUNITY CENTER

Town of Sudbury

November 19, 2019





CITY HALL CAMPUS
CITY OF FITCHBURG, MA



ONE CANAL
BOSTON, MA



SIMPKINS SCHOOL RESIDENCES
SOUTH YARMOUTH, MA



PERFORMING ARTS CENTER
CITY OF NASHUA, NH



KARPOVICH READING ROOM
SPRINGFIELD, MA



A Feasibility Study Is:

- Analysis – space program, costs, schedule, site and environmental conditions
- Assessment – existing conditions - site and building survey, evaluate pros and cons of alternate plans
- Identification – risks and opportunities
- Determination – practicality/viability of proposed plan

What It Is Not:

- A design
- An architect's opinion of what the program and client goals should be
- A comprehensive review of building codes, which is part of the design process
- A lofty, unattainable proposal



Capital Project

- Owner
- Architects
- General Contractor

General Contractor (GC)

Construction Manager (CM)

Owner's Project Manager (OPM)

Commissioning (Cx)

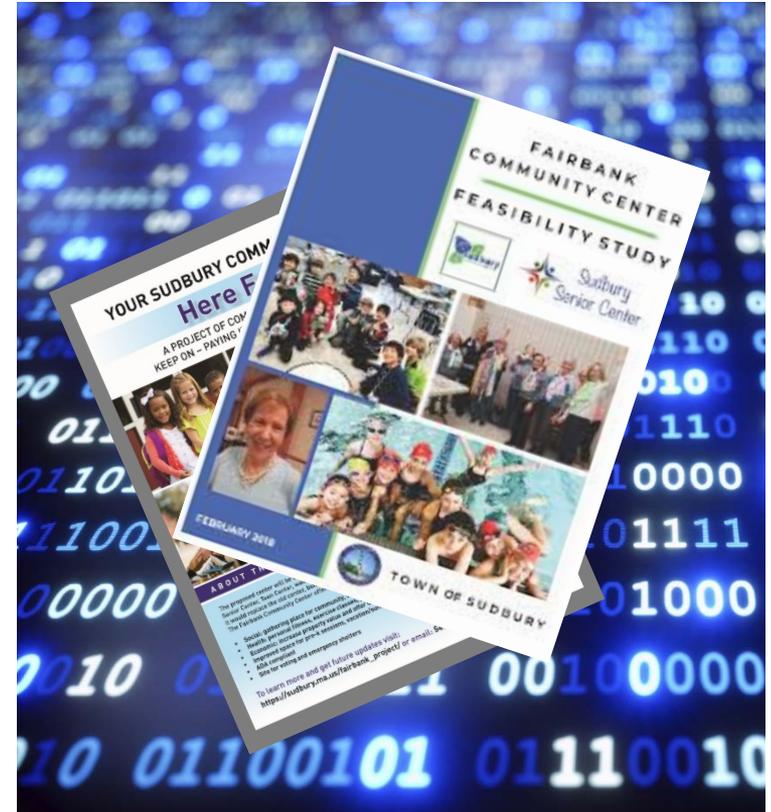
Estimated Construction Cost (ECC)

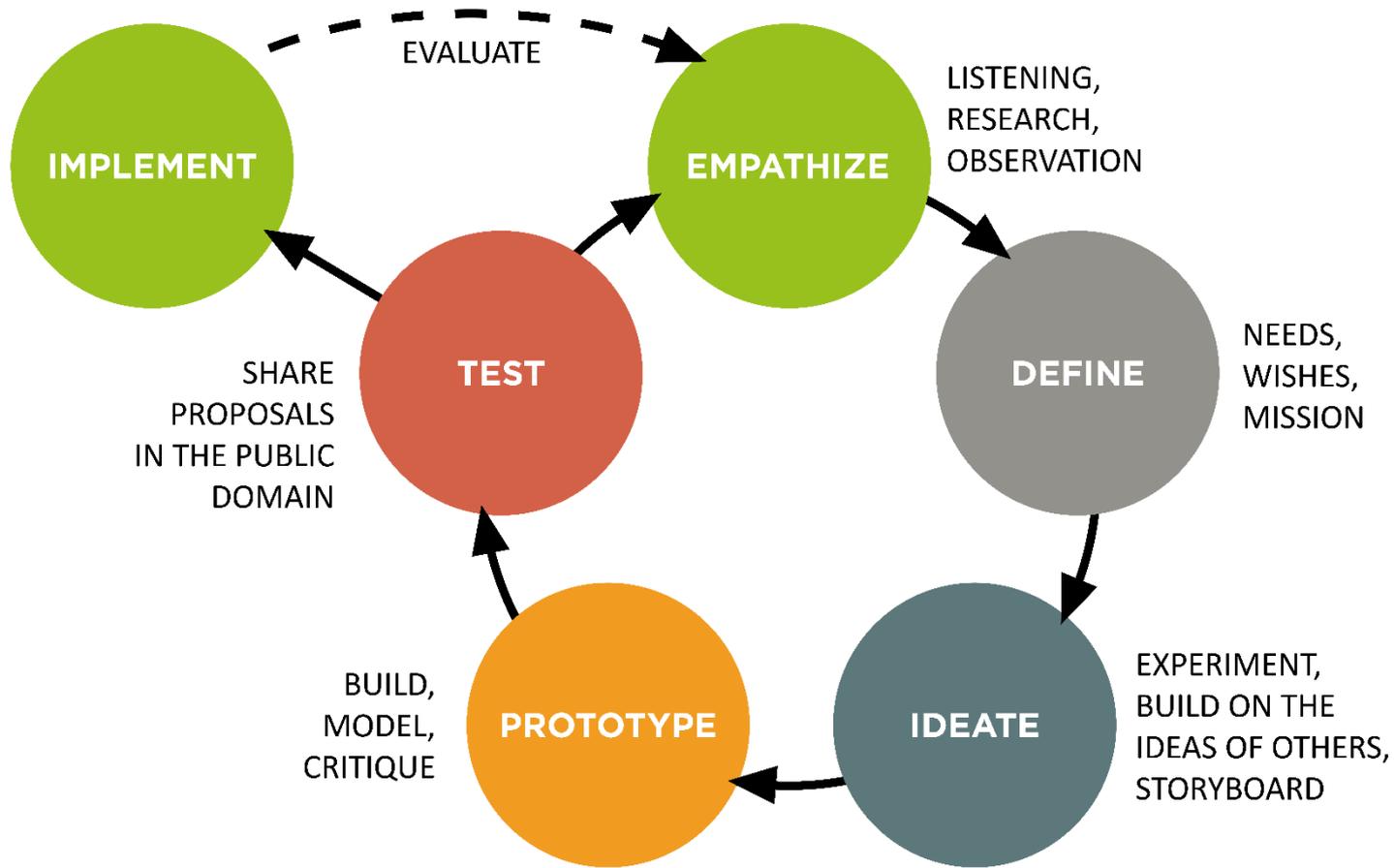
Total Project Cost (TPC)

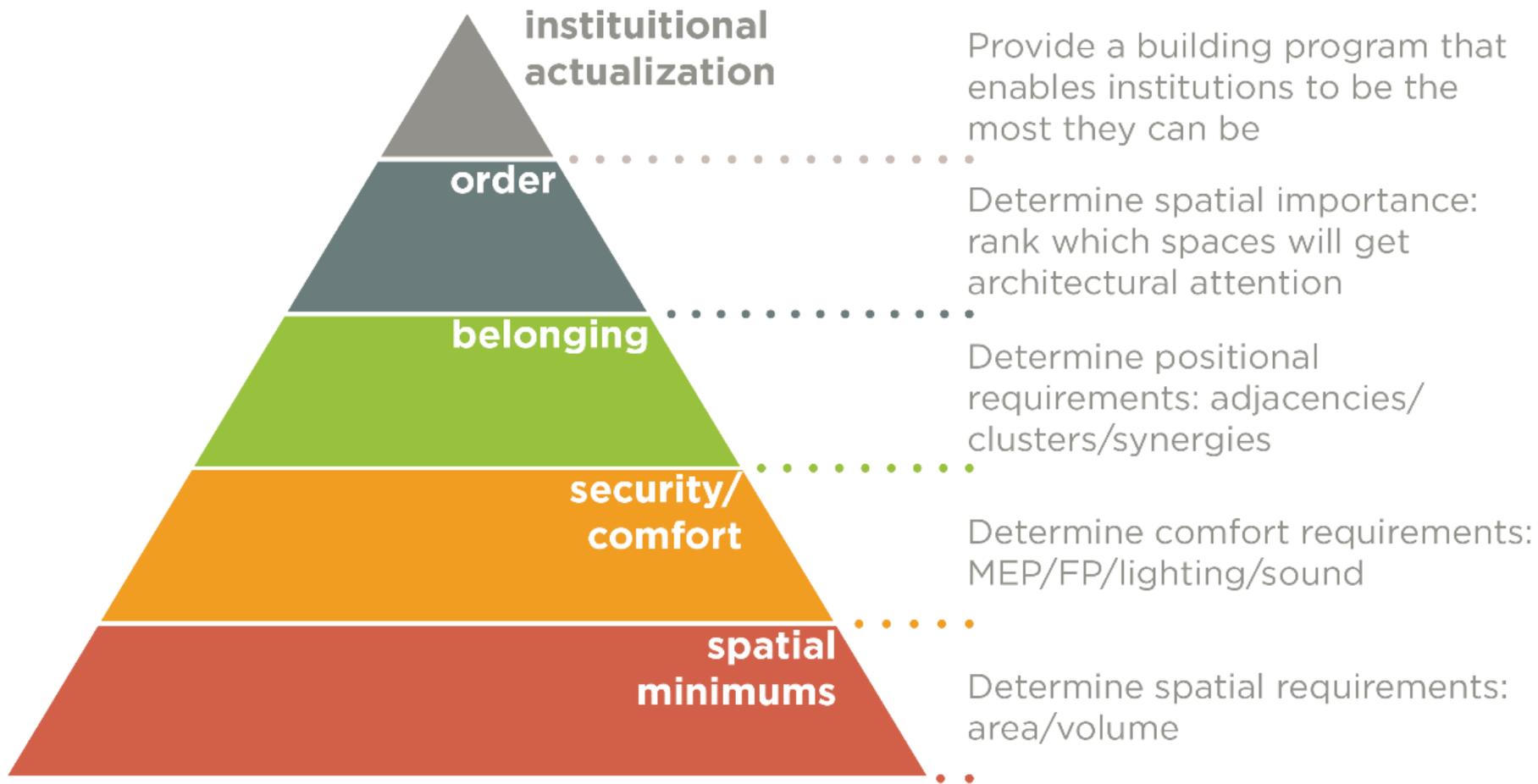


Assess practicality of a new Fairbank Community Center

- Survey existing conditions
- Collaborate with stakeholders to determine needs
- Investigate programmatic efficiencies
- Rationally identify strengths and weaknesses
- Study multiple site and planning options
- Publish consensus program solution
- Establish cost parameters
- Deliver statement of probable costs and conceptual program diagrams







PROGRAMMING MEETINGS/PROCESS

	COMMON AREAS	4,213 GSF
	SHARED SPACES	1,743 GSF
	SENIOR CENTER	3,798 GSF
	PUBLIC SCHOOLS	8,709 GSF
	RECREATION	4,590 GSF
	AQUATICS	14,361 GSF
	GYM/STAGE (SHARED)	3,490 GSF
TOTAL GSF		40,904 GSF



- Existing space isn't high quality
- Existing building is very deep - limited daylighting possibilities
- Already multiple additions
- High performing envelope becomes more challenging and expensive
- 15% cost difference between renovation and new; however, less risk
- Site Issues



WHY NOT RENOVATION OR ADAPTIVE REUSE?



- Library/Community Center – Providence, RI
 - 65,000 GSF - \$560/SF
- Community Center – Connecticut
 - 35,000 GSF – \$550/SF
- Community Center – Massachusetts
 - 50,000 GSF - \$525/SF

The current proposal would have been priced at \$23.5M two and half years ago.
(Roughly 14% escalation)



For Sudbury Community Center:

- Range \$515 - \$525/GSF
- Gymnasia \$385/GSF

Cost/GSF includes:

- Site demolition
- Robust wall assemblies (durability)
- Commercial or catering kitchen
- Audio/Visual integration within (some) program rooms
- Multiple cladding options – brick, curtain wall, etc.
- Site work (playing courts, gardens, parking, etc.)
- VRF HVAC system - individual control/comfort

This is a medium-sized building, and there are limited economies of scale; smaller buildings cost more.

Add 30% to the Estimated Cost of Construction (ECC) for Total Project Cost (TPC).

The TPC includes:

- Owner's contingency
- Furniture, Fixtures and Equipment (FF+E)
- Design team fees
- Utility fees
 - However, there are typically some rebates
- Specialty consultants
 - Hazmat
 - Geotech
 - Survey



SUDBURY FAIRBANK COMMUNITY CENTER - Final Building Program - 11-19-2019

Existing Building Program Summary	GSF
Common Areas	4213
Shared Spaces	1743
Senior Center	3798
Sudbury Public Schools	8709
Recreation Center	4590
Aquatics	14361
Gymnasium, Stage, and Storage (Shared)	3490
Existing Building	40904
Proposed Building Program Summary	GSF
Common Areas	4069
Shared Spaces	8179
Senior Center	5754
Sudbury Public Schools	7713
Recreation Center	11700
Aquatics (Not in New Construction Total)	14361
Gymnasium	5160
Total Proposed Building Program with Aquatics	56936
Total Proposed Building Program for New Construction	42575

Proposed Aggregate GSF

Senior Center

Dedicated: 5,754 GSF

Aggregate: 15,289 GSF

Recreation Center

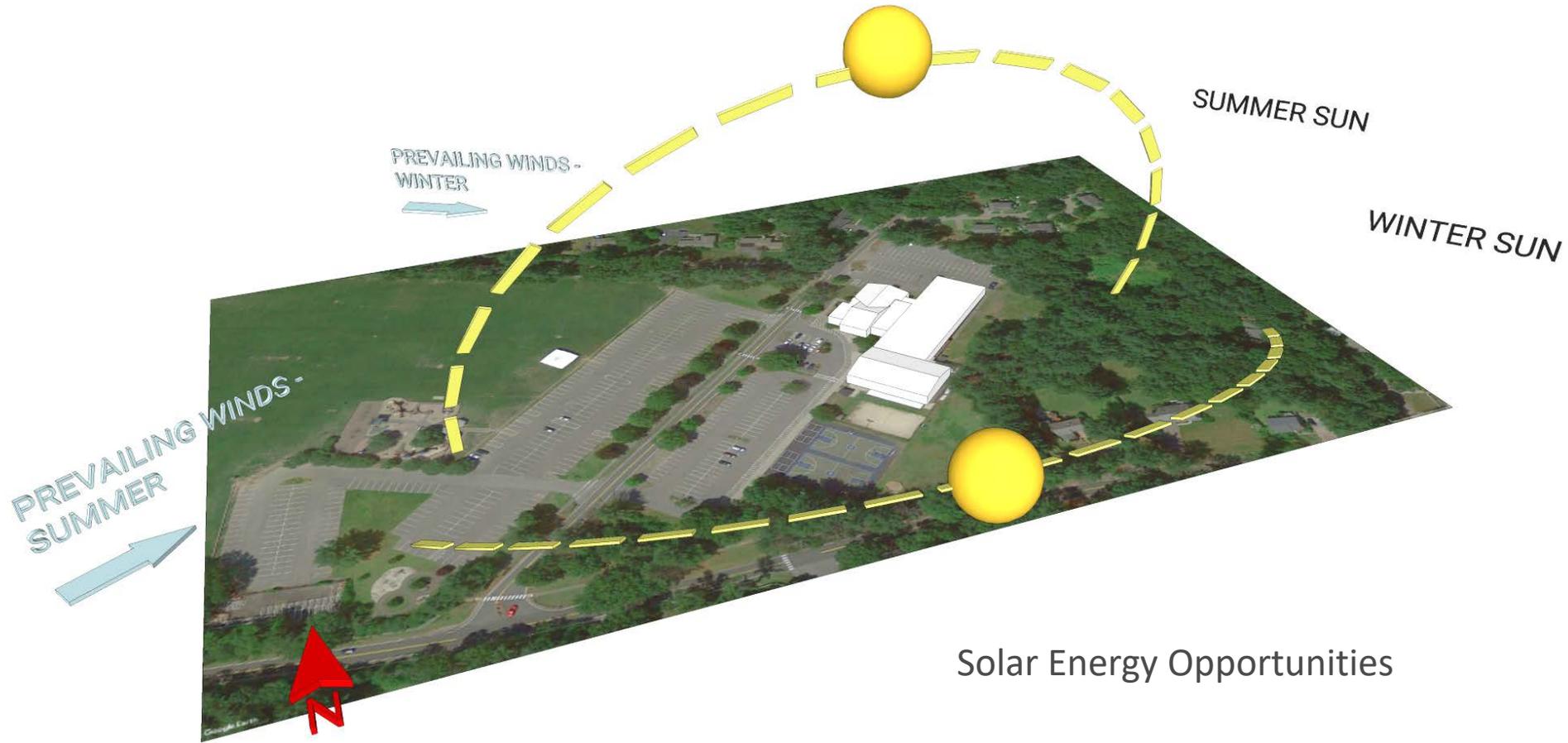
Dedicated: 11,700 GSF

Aggregate: 21,235 GSF

Emergency Shelter

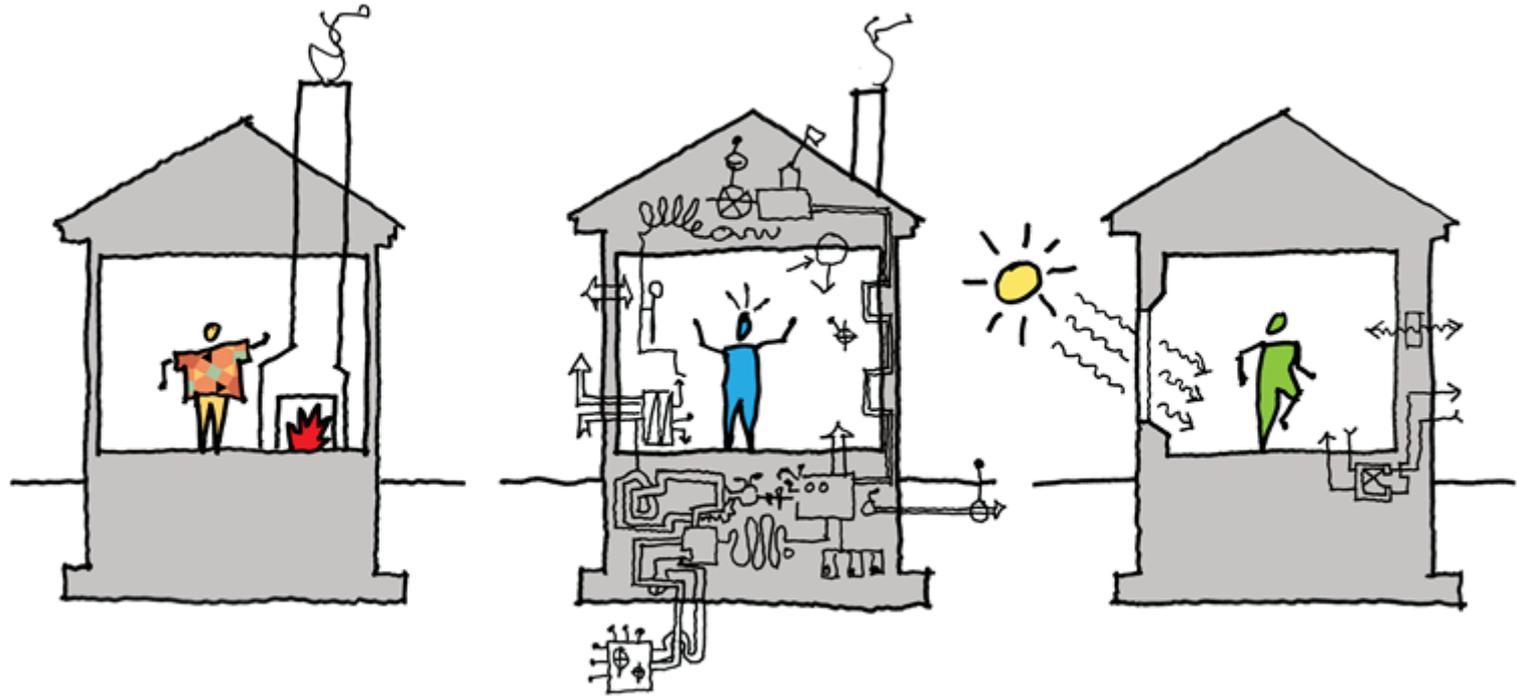
12,490 GSF





Solar Energy Opportunities





Credit: Albert Richter Tittmann Architects



PASSIVE HOUSE



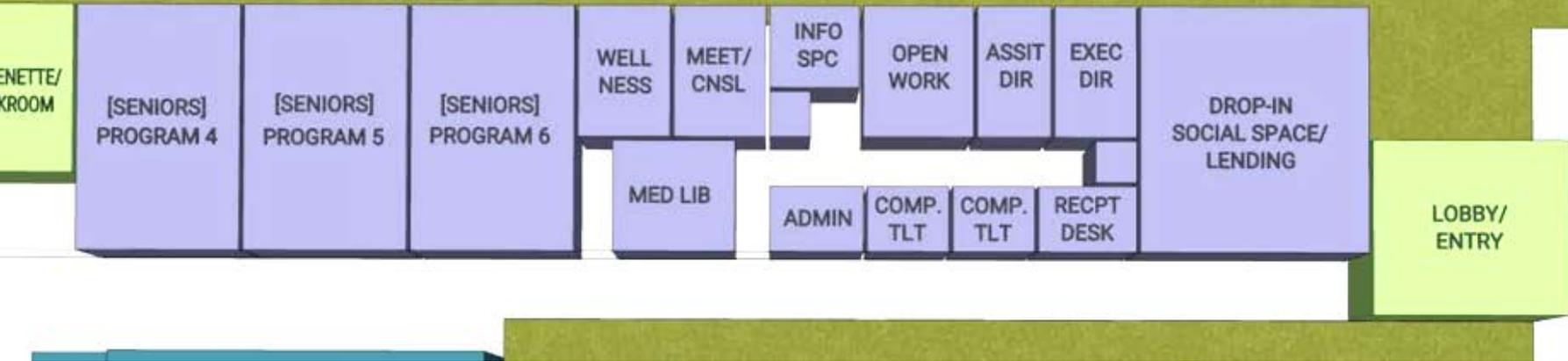
CONSENSUS SOLUTION OVERHEAD – FROM SOUTH



CONSENSUS SOLUTION OVERHEAD – FROM NORTH



CONSENSUS SOLUTION OVERHEAD – FROM SOUTHEAST



LOBBY/
ENTRY

TODDLER SPACE
W/ CHILD TLT ROOMS

PGM
STOR

OPEN
OFF

RECEPT

COPY

ADMIN

[RECREATION]
PROGRAM 1

[RECREATION]
PROGRAM 2

[RECREATION]
PROGRAM 3

ELEC

MECH

REC
DIR

ASSIST
DIR

PGM 1

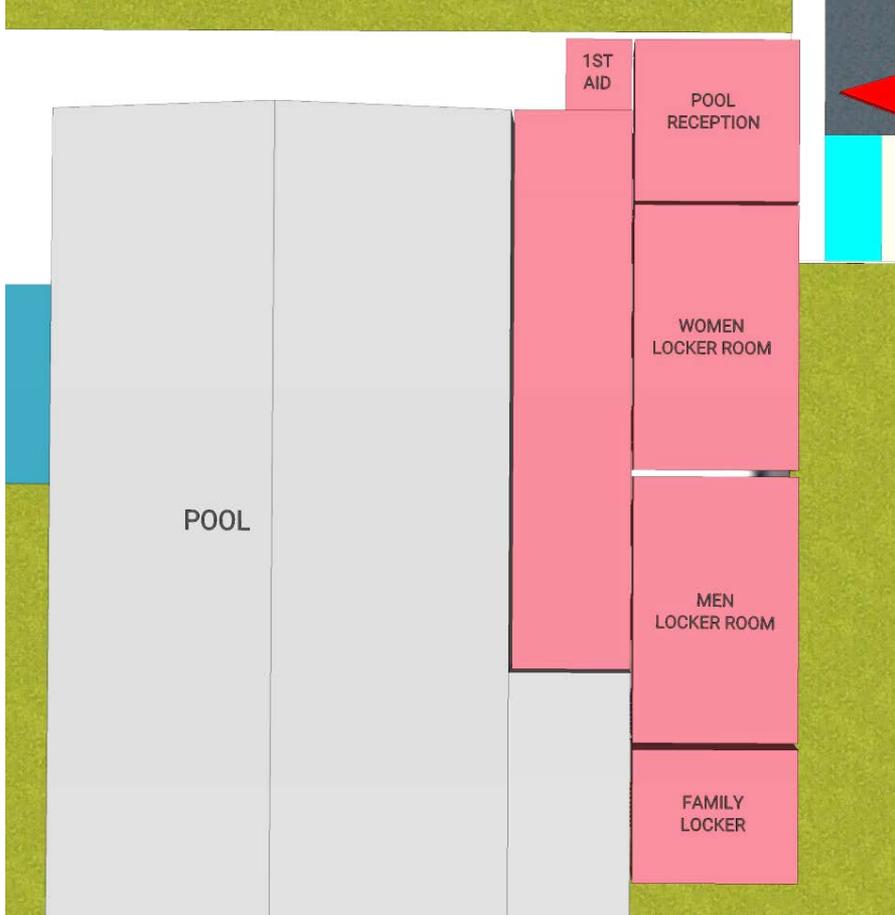
PGM 2

LS
ELEC

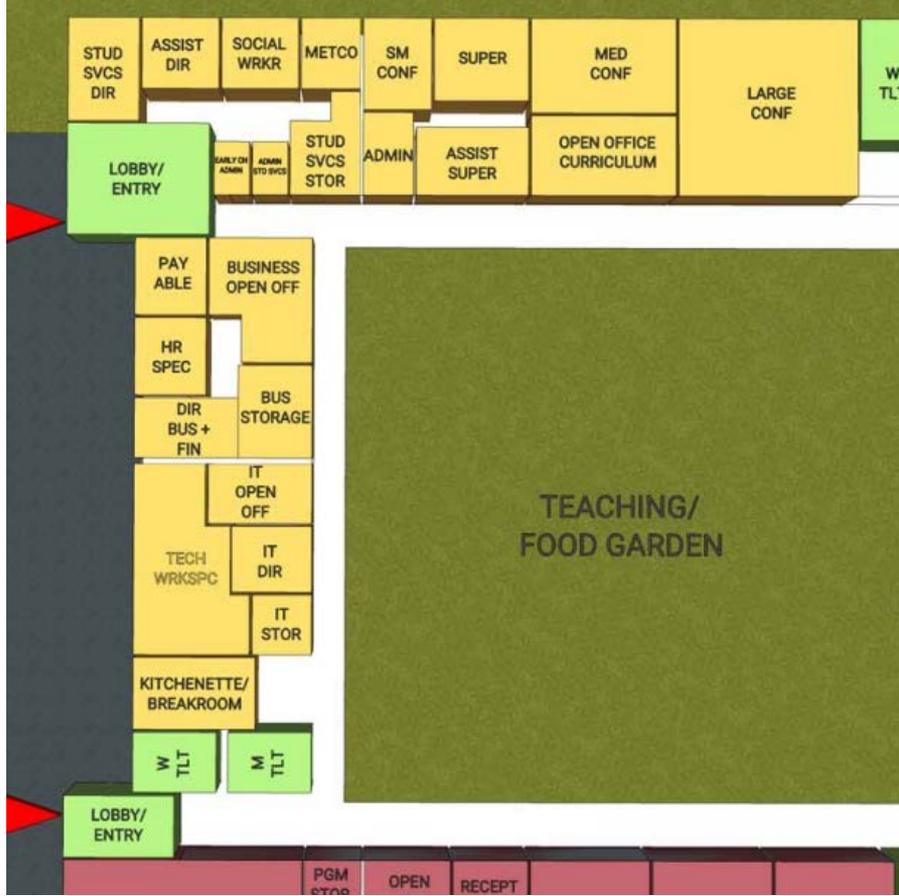
PLUMB/FP

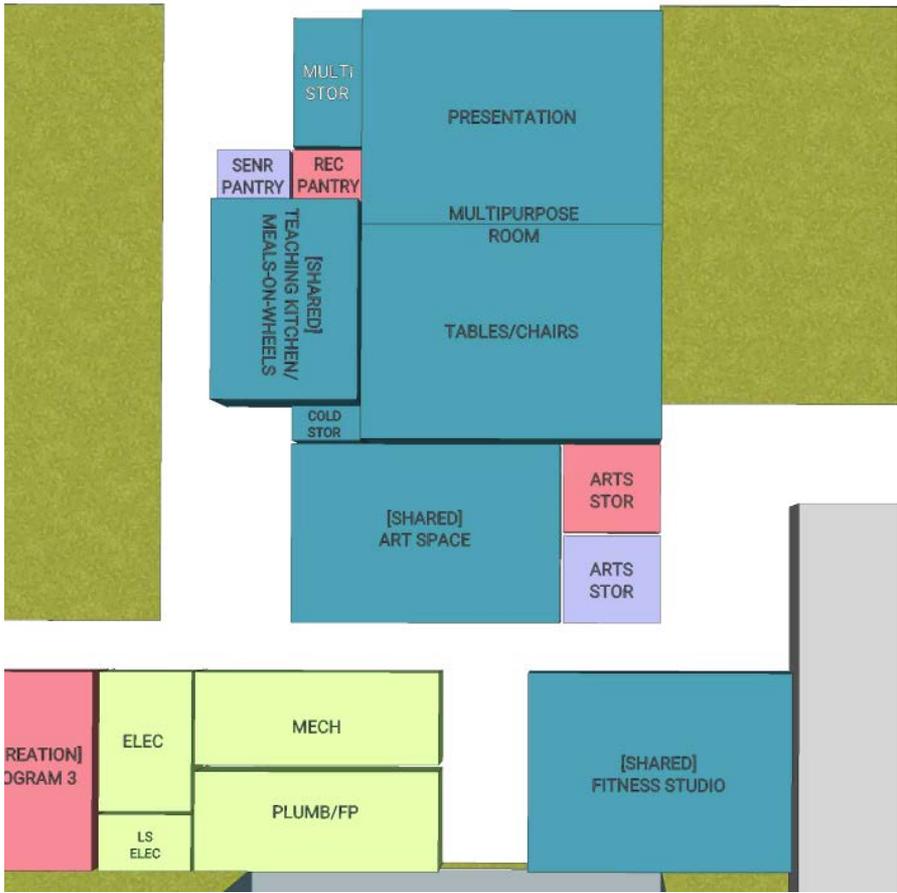


CONSENSUS SOLUTION RECREATION



CONSENSUS SOLUTION RECREATION







CONSENSUS SOLUTION OVERHEAD

COMMON AREAS		Nov 7 - Net SF	Comments
Vestibules, Toilet Rooms, Mechanicals			
Building Lobby		700	
Entry Vestibule		130	
Pool Vestibule		120	
Shared Breakroom/Kitchenette (Rec/Senior Ctr)		240	
Men's Restroom		450	Two 2-Fixture Toilet Rooms, One 3-Fixture
Women's Restroom		450	Two 2-Fixture Toilet Rooms, One 3-Fixture
Elec		180	
Life Safety Elec		100	
Plumb/FP		200	
Mech		400	Current NSF includes all MEP/FP
Common Areas Total Gross Square Feet		2970	
Net to Gross 1.37		4069	

SHARED SPACES		Nov 7 - Net SF	Comments
Multipurpose Room		3000	
Multipurpose Storage		200	
Commercial Kitchen		650	Adjacent multipurpose, and maybe Senior Social space
Commercial Kitchen Walk-in Cold Storage		80	
Commercial Kitchen Storage		40	
Fitness Studio		1000	
Art Space		1000	Part of Teen Center
Shared Spaces Total Gross Square Feet		5970	
Net to Gross 1.37		8179	



SENIOR CENTER		Nov 7 - Net SF	Comments
Administrative Area			
Executive Director		150	
Assistant Director (future Position)/ Program Coordinator		120	
Administrative Assistant		95	
Information Specialist		95	
Workspace for 4 (grant employees & volunteers)		150	
Small Meeting Room/Counseling		150	
Wellness Office		160	
Copy/Supplies		80	
Coat Closet			In net-to-gross
Subtotal		1000	
Program Spaces and Storage Spaces			
Drop-in Social Space/Lending Library		800	
Reception Area		80	
Arts & Crafts Storage		100	
Kitchen Pantry		60	
Program Room 4		600	
Program Room 5		600	
Program Room 6		600	
General Storage			In net-to-gross
Subtotal		2840	2510-Project Estimations Spreadsheet
Department Back-of House			
Companion Toilet Rooms		160	One for each gender
Medical Equipment Lending Library		200	
Subtotal		360	
Senior Center Total Gross Square Feet		4200	
Net to Gross 1.37		5754	



SCHOOL ADMINISTRATION	Nov 7 - Net SF	Comments
Front-of-House		
Lobby/Waiting/Entry	300	
Security	50	
Subtotal	350	
Administration		
Superintendent	225	
Executive Assistant	55	
Subtotal	280	
Administration and Curriculum		
Assistant Superintendent	225	
Open office for:		
Math Curriculum Coordinator	60	
Humanities Curriculum Coordinator	60	
Science Curriculum Coordinator	60	
Science Coach	60	
Wellness Curriculum Specialist	60	
Storage	100	
Subtotal	625	
Student Services		
Student Services Director	150	
Assistant Student Services Director	100	
Social Worker/Team Chair	100	
METCO Director	100	
Admin Assistant to Student Services	55	
Early Childhood Admin Assistant	55	
Storage - Active - IEP's /Documents	60	
Storage - Long Term	100	
Subtotal	720	
Business and Finance		
Director of Business and Finance	150	



HR Specialist	100	
Accounts Payable Accountant	100	
Open Office for:		
Payroll Clerk	55	
Business Office Clerk 1	55	
Business Office Clerk 2	55	
Mail Clerk	55	
Dedicated work space for visitors	55	
Dedicated work space for visitors	55	
Storage -Active -Payroll	60	
Storage -Active - HR	60	
Storage - Long Term -Payroll	60	
Storage - Long Term -HR	60	
Subtotal	920	

Information Technology		
Director of Technology	100	
Open Office for:		
Network Specialist	55	
Elementary Tech. Specialist	60	
Data Specialist	55	
Storage for Tech	100	
Technology Workspace (Server Room?)	500	
Subtotal	870	

Conference Room and Back-of-House		
Conference (Small 1-6 People)	180	To be adjacent to Superintendent
Conference (Medium 1-15 People)	360	
Conference/Curriculum Development (Large 13-30 People)	1000	
Kitchenette/Break Room	225	Strong Preference for separate break area
Copy Room/Storage	100	
Custodial		In net-to-gross
Subtotal	1865	

Sudbury Public Schools Total Gross Square Feet	5630	
Net to Gross 1.37	7713	



Administration		
Reception (covers Building Lobby & Rec. Dept.)	100	
Director's Office	150	
Assistant Director & Office Coordinator Office	150	
Admin. Assistant	40	
Common Office	160	
Program Office 1 (Program & Youth Coordinator)	100	
Program Office 2 (Rec. & Fitness Programming)	100	
Copy/Supplies	60	
Subtotal	860	

Program Space		
Program Room 1	600	
Program Room 2	600	
Program Room 3	600	
Preschool Space with integral child toilet rooms	1200	
Arts & Crafts Storage	60	
Camp/Off Season Storage	100	
Gymnasium	4960	
Gymnasium Storage	200	
Subtotal	8320	
Subtotal Less Gym	3160	Gymnasium carried separately above

Aquatics		
Pool Lobby & Reception	400	50% in net-to-gross factor
Existing Pool Space	10800	Existing
Addition - Bleacher Seating/Aquatics Office	1500	To square off existing adjacent area
Pool Storage		Existing
Pool Filtration	420	Existing
Pool Electrical	191	Existing
Pool Mech/Support	770	Existing
Aquatics Office	250	Existing
First Aid Treatment	120	
Pool Locker Rooms - Men	1000	
Pool Locker Rooms - Women	1000	
Family Changing Room	500	Companion Changing internal
Subtotal	4520	New Construction/Existing spaces excluded

Recreation Center Total Gross Square Feet	8540
Net to Gross 1.37	11700

OVERALL PROJECT BUDGET WORKSHEET

Fairbank Community Center
Sudbury, MA
19-Nov-19

1	BUILDER'S RISK INSURANCE	In Construction Cost	\$0.00
2	ARCHITECTURAL & ENGINEERING FEES	Feasibility Study + 8% of Construction	\$1,873,059.00
3	ADDITIONAL DESIGN & PROFESSIONAL SERVICES	Commissioning	\$50,000.00
4	CONSTRUCTION COST		
	Demolition		\$184,500.00
	Site		\$3,717,191.00
	Trade Costs		\$14,168,584.00
	Constructions Management Fees and Costs		\$2,577,629.00
	Estimating Contingency	12%	\$2,168,433.00
	SUBTOTAL		\$22,816,337.00
5	TESTING OF SOILS, MASONRY, STEEL, MATERIALS, ETC.	In Owner's Contingency	\$0.00
6	AUDIO / VISUAL EQUIPMENT	Allowance	\$50,000.00
7	FF&E / MISCELLANEOUS	Allowance	\$375,000.00
8	SIGNAGE - EXTERIOR	Allowance	\$5,000.00
9	UTILITY COMPANY CHARGES		\$0.00
	SUBTOTAL		\$25,169,396.00
10	OWNER'S CONTINGENCY	10% of Construction	\$2,315,800.00
	Total Project Cost (TPC)	TOTAL	\$27,485,196.00
	ESCALATION	Mid-point of 2021	\$596,902.00
	OWNER'S PROJECT MANAGER (OPM)	3%-5% of Construction	\$702,400 - \$1,170,660
	COST OF GYMNASIUM	(Deduct Alternate)	\$2,172,555.00



TOTAL PROJECT COST – NEW CONSTRUCTION

Existing Building Program Summary	GSF	Typical Renovation Cost \$450/SF*
Common Areas	4213	\$ 1,895,850.00
Shared Spaces	1743	\$ 784,350.00
Senior Center	3798	\$ 1,709,100.00
Sudbury Public Schools	8709	\$ 3,919,050.00
Recreation Center	4590	\$ 2,065,500.00
Aquatics*	14361	\$ 359,025.00
Gymnasium, Stage, and Storage (Shared)	3490	\$ 1,570,500.00
Existing Building	40904	
Trade Cost Subtotal		\$ 12,303,375.00
		*Aquatics renovation at \$25/SF for deck and other pool repairs

RENOVATION — OVERALL PROJECT BUDGET WORKSHEET			
Fairbank Community Center			
Sudbury, MA			
19-Nov-19			
1	BUILDER'S RISK INSURANCE	In Construction Cost	\$0.00
2	ARCHITECTURAL & ENGINEERING FEES	Feasibility Study + 8% of Construction	\$984,270.00
3	ADDITIONAL DESIGN & PROFESSIONAL SERVICES	Commissioning	\$50,000.00
4	CONSTRUCTION COST		
	Selective Demolition		\$184,500.00
	Site		\$1,233,750.00
	Trade Costs		\$12,303,375.00
	Constructions Management Fees and Costs		\$2,238,284.14
	Estimating Contingency	15%	\$1,845,506.25
	SUBTOTAL		\$17,805,415.39
5	TESTING OF SOILS, MASONRY, STEEL, MATERIALS, ETC.	In Owner's Contingency	\$0.00
6	AUDIO / VISUAL EQUIPMENT	Allowance	\$50,000.00
7	FF&E / MISCELLANEOUS	Allowance	\$375,000.00
8	SIGNAGE - EXTERIOR	Allowance	\$5,000.00
9	UTILITY COMPANY CHARGES		\$0.00
	SUBTOTAL		\$19,269,685.39
10	OWNER'S CONTINGENCY	13% of Construction	\$1,599,438.75
	Total Project Cost (TPC)	TOTAL	\$20,869,124.14
	ESCALATION	Mid-point of 2021	\$518,319.85
	OWNER'S PROJECT MANAGER (OPM)	3%-5% of Construction	\$369,100 - \$615,200
	COST OF GYMNASIUM		N/A



TOTAL PROJECT COST – RENOVATION

E-ICON
ARCHITECTURE