Mansfield Board of Education

Meet TSKP STUDIO

November 8, 2018

TSKP STUDIO ARCHITECTURE | PLANNING | INTERIORS

Developing a Conceptual Design for our New Elementary School

Meet the Architects from TSKP Studio

Ryszard Szczypek, Jeff Brown,

Tai Soo Kim, Christine O'Hare

How we came to identify one new elementary school as the best solution for the future of Mansfield's students.

A BRIEF REVIEW OF ACTIONS TO DATE

Introduction | Review

School Facility Planning Study – Completed September 2017

Input gathered from more than 100 members of the community

- Focused on the mission and vision for learning
- Examined current facility conditions and needs
- Reviewed student performance and engagement
- Reviewed school enrollment projections for next ten years
- Analyzed expenditures, revenues, and future forecast

Introduction | Review

Goals for Learning Spaces

We believe our learning spaces should include…

1. **Common Spaces**
   Open, flexible common spaces that promote collaboration, teamwork, movement, and play
2. **Classroom Spaces**
   Large, flexible classrooms that allow for project-based learning, collaboration, and movement
3. **Quiet Spaces**
   Enclosed, soundproof spaces for individual reflection and quiet work time
4. **Furniture & Seating**
   Multiple options for comfortable seating and standing which can be reconfigured to promote student agency in creating the environment that best meets their learning needs
5. **Outdoor Spaces**
   Outdoor learning spaces which support the integration of the environment and academic learning
6. **Accessible Resources**
   Accessible physical and digital resources, materials, and tools to facilitate student creativity and exploration

Considering the Options

Board of Education held three workshops to consider the findings of the study, gather additional information, and consider options:

- Renovate all existing schools
- Consolidate and renovate schools
- Change grade configurations
- Build new schools – 3
- Consolidate and build new school(s)

Engaging the Community – Winter 2018

Brought options to the community for feedback – more than 200 people participated. Provided information on:

- Enrollment
- Condition and needs of current buildings
- State revenues
- Reimbursement grants from State of CT
- Research on school size and grade configuration
- Sustainability
- Transportation
- Mission and Vision for Learning
- School design practices today

Summary of Community Input

- Educational programs and sense of community must remain strong
- Maintaining three schools is costly, renovations would be disruptive and may not be reimbursed by state
- Building should support goals of education system
- One school supports fiscal and educational needs
- One school reduces energy costs and some staff overlap
- One school allows for improved facility such as gym and cafeteria space; flexible learning spaces; and spaces designed to meet variety of student needs
- Bringing students and teachers together increases diversity, supports collaboration, strengths programs, and enhances social experiences

BOE and Town Council Actions

- BOE requested that a School Building Committee be created to build one new elementary school in a central location
- Town Council created a School Building Committee
- School Building Committee has hired an Owner Representative (Collier's International) and Architect (TSKP Studio)
- Variety of sites in the center of town are undergoing examination
- Building conceptual design and educational specifications under development

Elementary School Design | DESIGN GOALS

- Child-Friendly
- Small Scale
- Bright & Inviting
- Flexible & Multi-Use
- Integrate with Nature
- Sustainability

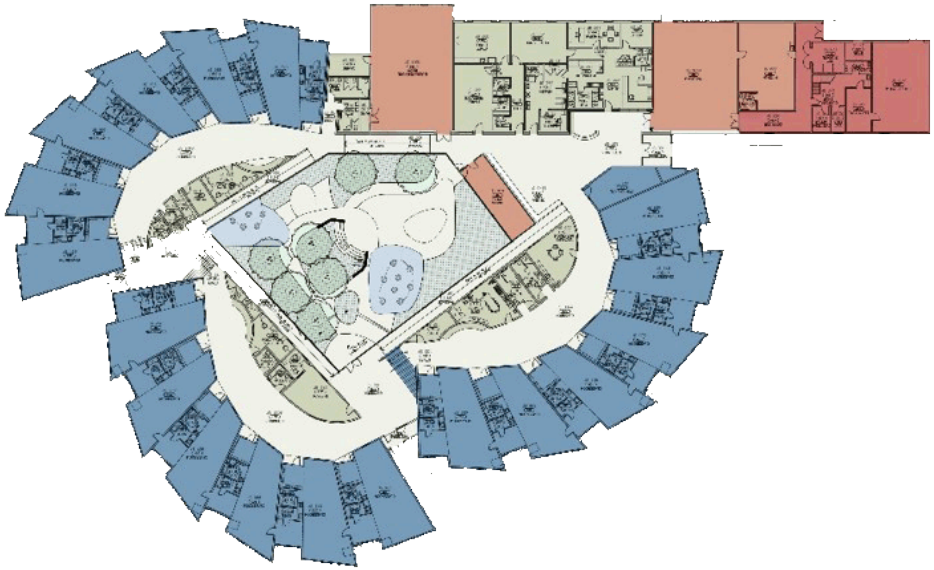
Elementary School Design | Child Friendly

Elementary School Design | Child Friendly

Elementary School Design | Child Friendly

Elementary School Design | Child Friendly

Elementary School Design Small Scale



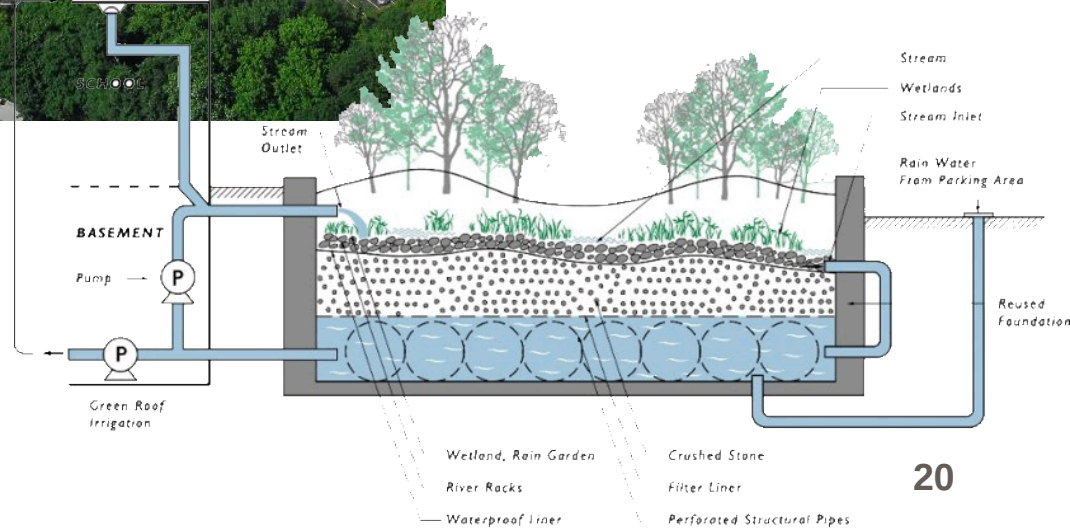
Elementary School Design Small Scale

Elementary School Design | Bright & Inviting

Elementary School Design | Bright & Inviting

Elementary School Design | Flexible & Multi-Use

Elementary School Design | Sustainability



Elementary School Design | Sustainability

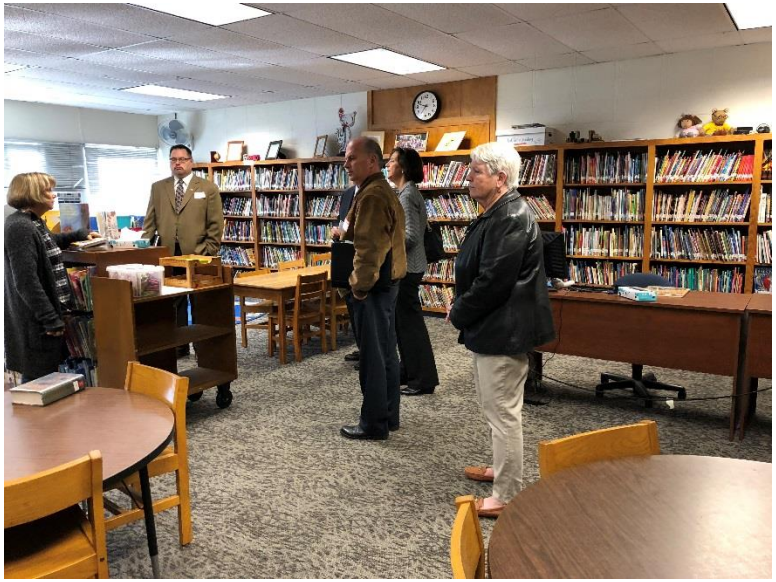
What We Observed | Cafe-Gymatorium and Other Phys Ed

What We Observed | Dining Rooms vs. Mess Halls

What We Observed | Lockers in Corridors

What We Observed | Accessory Structures

What We Observed | Small Libraries

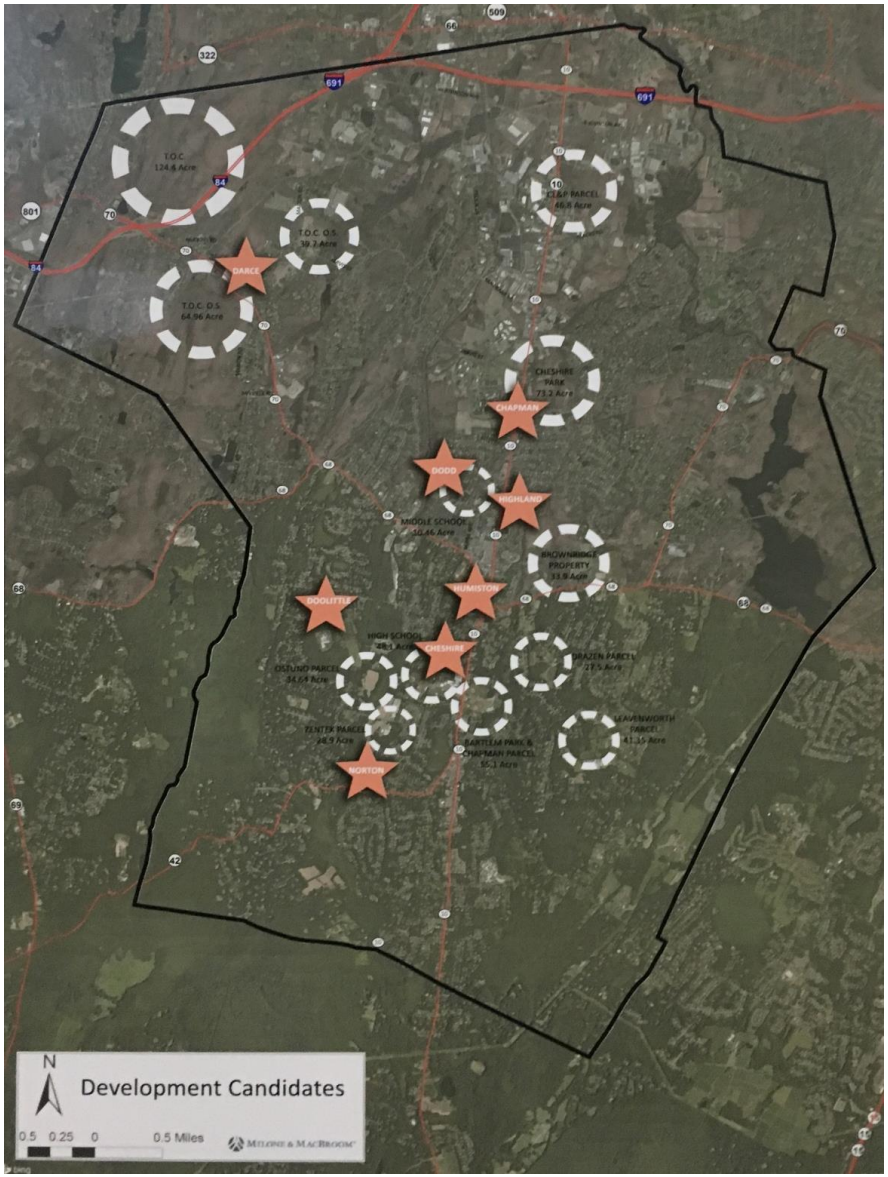


What We Observed | Small Music Rooms

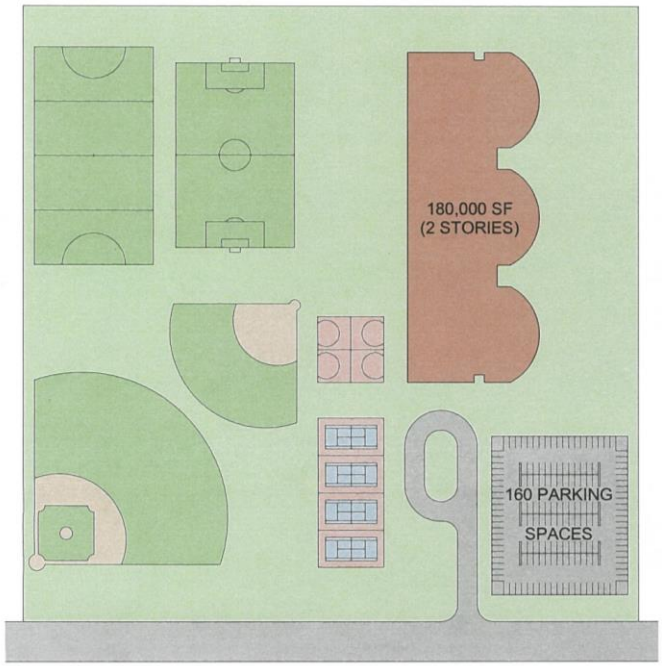
What We Observed | Teacher Innovation

What We Observed | Teacher Innovation

Site Evaluation & Selection | Example



Site Evaluation & Selection | Example: Ideal Site

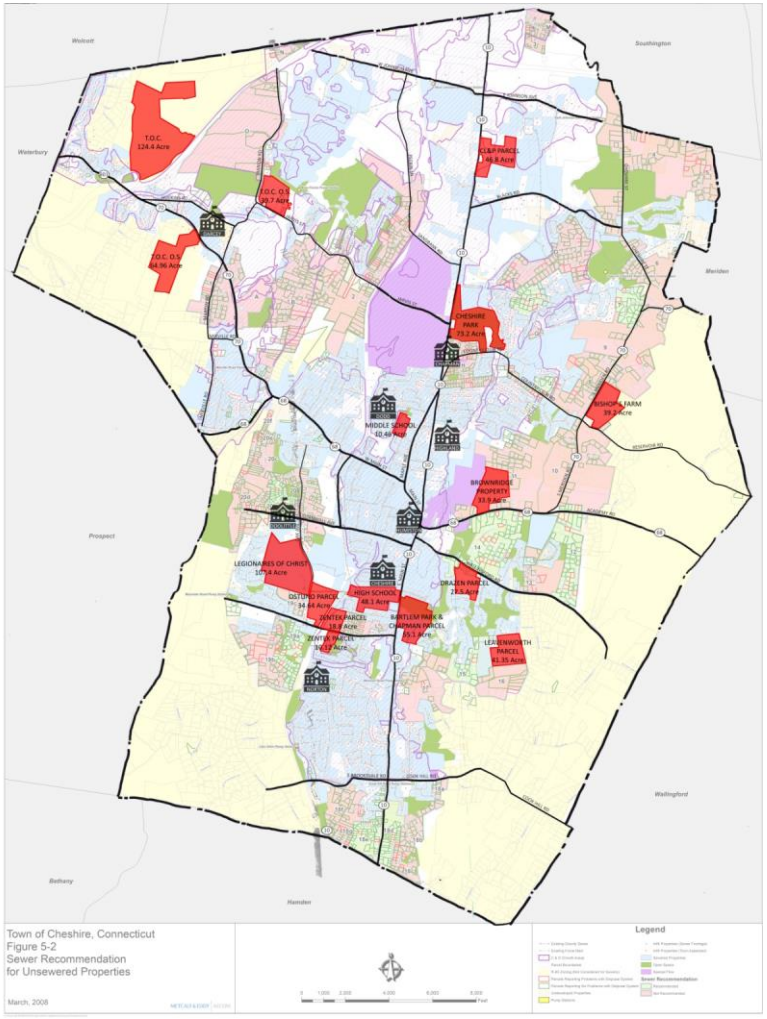


IDEAL SITE

- 20 ACRES MINIMUM
- PLAYFIELDS AS SHOWN
- 1000 TO 1200 PUPILS, GRADES 6, 7, AND 8
- BUILDING = 170,000 SF TO 190,000 SF

0' 200' 400' 600'

SCALE: 1"=200'-0"



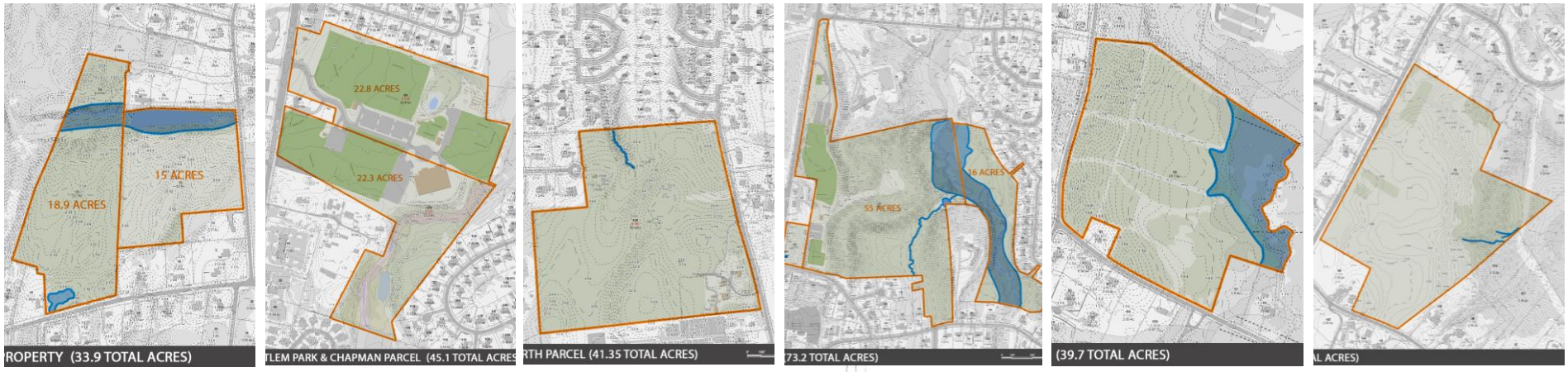
Site Evaluation & Selection | Example: Evaluation Matrix

	Property Name	Location	Approx. Acreage	Total Score	**Adequate Useable Land** (without steep slopes, wetlands, etc.)	**Site Access** (Traffic, Street Quality, Frontage, etc.)	**Location** (Distance From Town Center)	**Surroundings** (Residential, Industrial, Highways, etc.)	**Utilities**	**Acquisition Cost**	**Swing Space Required**	**Demolition Cost**	**Environmental Concerns**	**Affects Public Land**
1	Drazen Parcel	251 Wallingford Rd	27.5	31	4	2	1	2	5	1	5	5	1	5
2	High School Site	525 South Main St	48.1	0	-	-	-	-	-	-	-	-	-	-
3	Brownridge Property	Academy Rd	33.9	39	3	5	5	5	4	1	5	5	1	5
4	Bartlem Park & Chapman Parcel	520 South Main St	55.1	34	5	1	5	5	5	5	3	1	3	1
5	Dodd Middle School	100 Park Pl	10.46	0	-	-	-	-	-	-	-	-	-	-
6	Ostuno Parcel	650 Oak Ave	34.64	0	-	-	-	-	-	-	-	-	-	-
7	Zentek Farms	325 Higgins Rd	28.9	26	1	1	2	5	?	1	5	5	1	5
8	Leavenworth Parcel	749 Coleman Rd	41.35	39	4	5	4	4	5	1	5	5	1	5
9	Cheshire Park	Highland Ave	73.2	44	5	5	4	4	5	5	5	5	5	1
10	Eversource Parcel	1550 Highland Ave	46.8	35	3	5	1	2	5	1	5	5	3	5
11	T.O.C. O.S. #1 - Marion Road	Marion Rd	39.7	37	5	2	1	5	3	5	5	5	5	1
12	T.O.C. O.S. #2 - Mixville Hills	Waterbury Rd	64.96	36	4	3	1	5	2	5	5	5	5	1
13	350 Knotter - Alexion Parcel *	350 Knotter Dr	75	31	4	4	1	1	5	1	5	1	4	5
14	T.O.C. O.S. #3 - I-84	Musso View Ave	124.4	26	1	1	1	1	1	5	5	5	5	1
15	Seminary	Oak Ave	90	34	5	2	2	3	5	1	5	3	3	5
16	Bishop Farms	Reservoir Rd	39	41	5	5	5	5	4	1	5	5	1	5

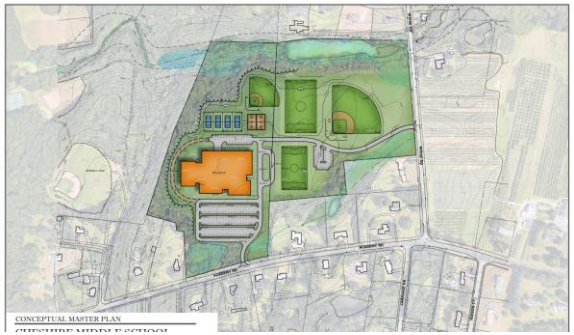
(Scores 1-5 where 1 is poor and 5 is excellent. A dash represents inappropriate site)

* Existing Building Needs Study

Site Evaluation & Selection | Example: Create Shortlist



Site Evaluation & Selection | Example: Reduce Shortlist

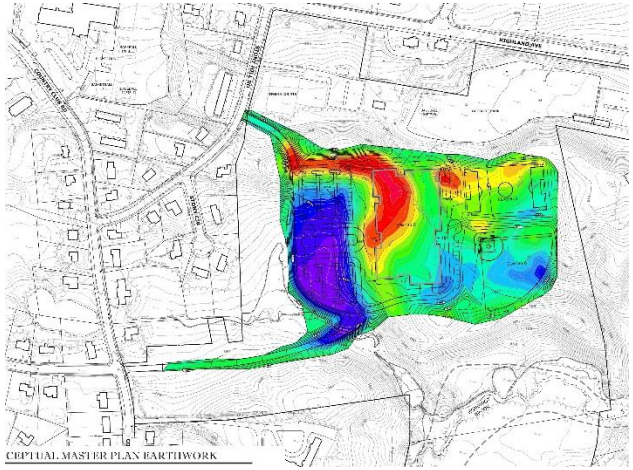


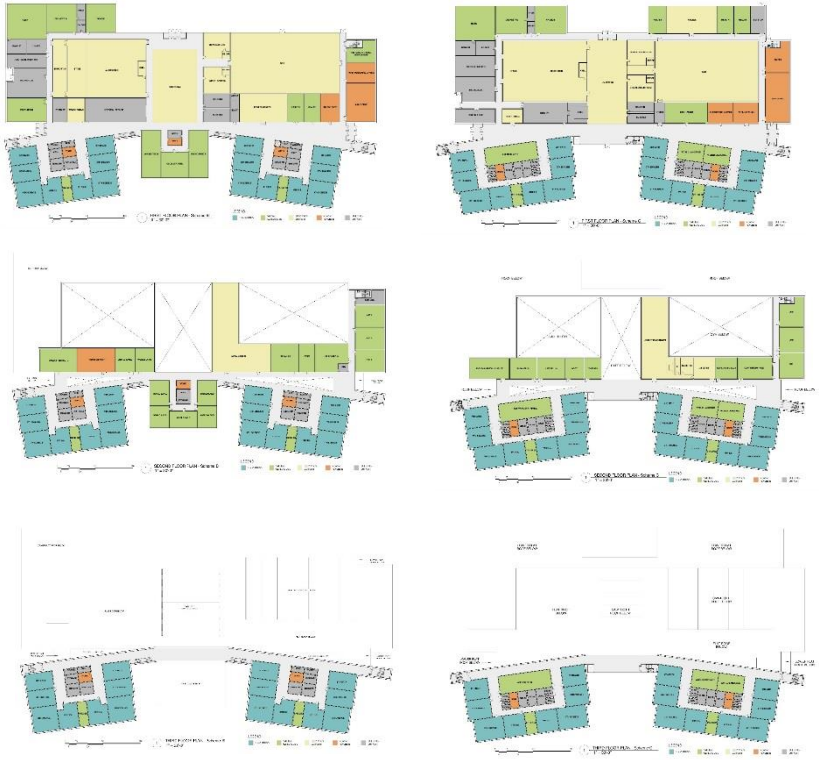
Site 1 $9,900,000

Site 2 $9,000,000

Site 3 $8,900,000

Site Evaluation & Selection | Example: Schematic Options





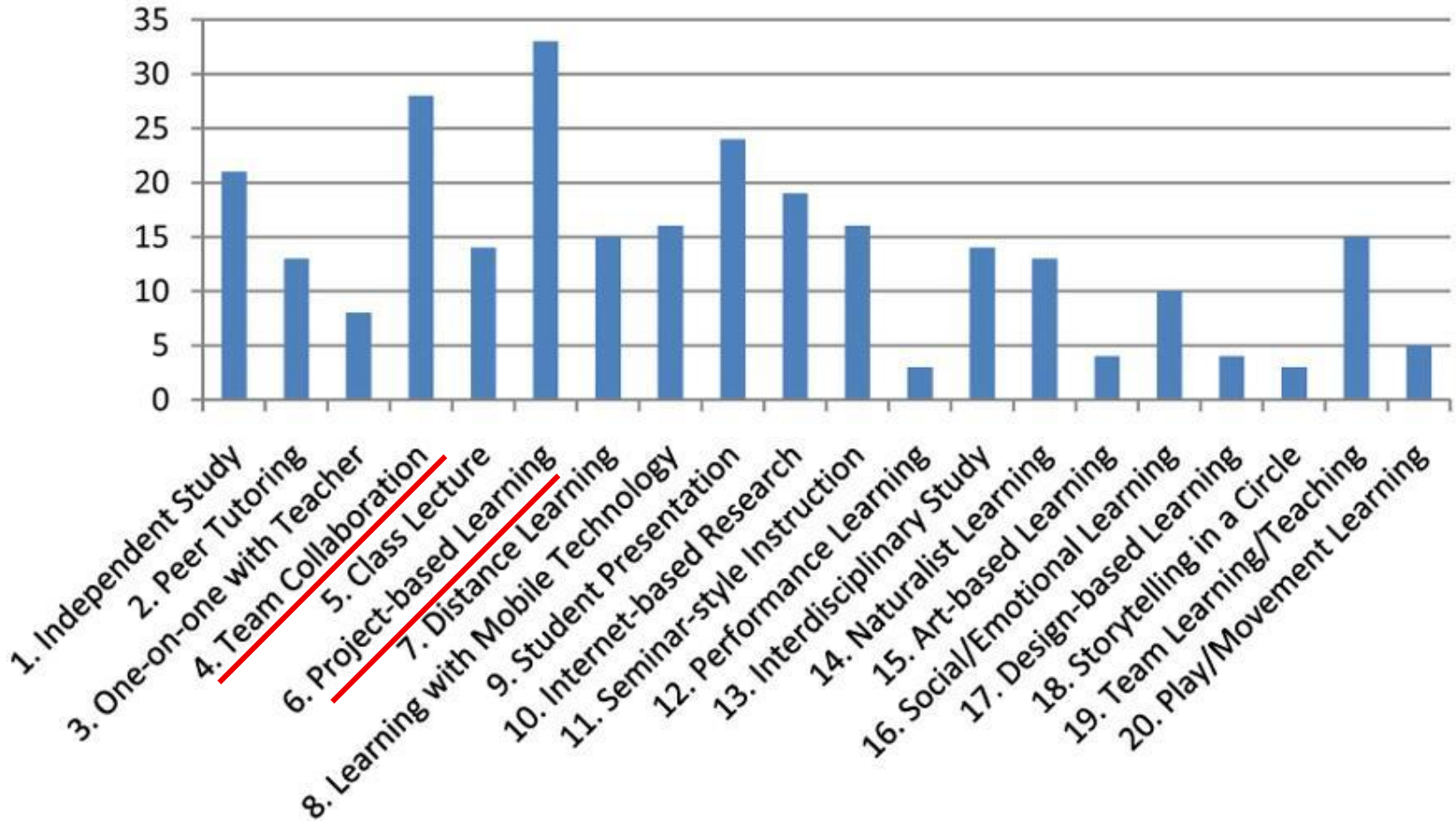
Scheme B

Scheme C

Educational Programming | Understanding Childhood

1880 “The Baby’s Bouquet” by Walter Crane

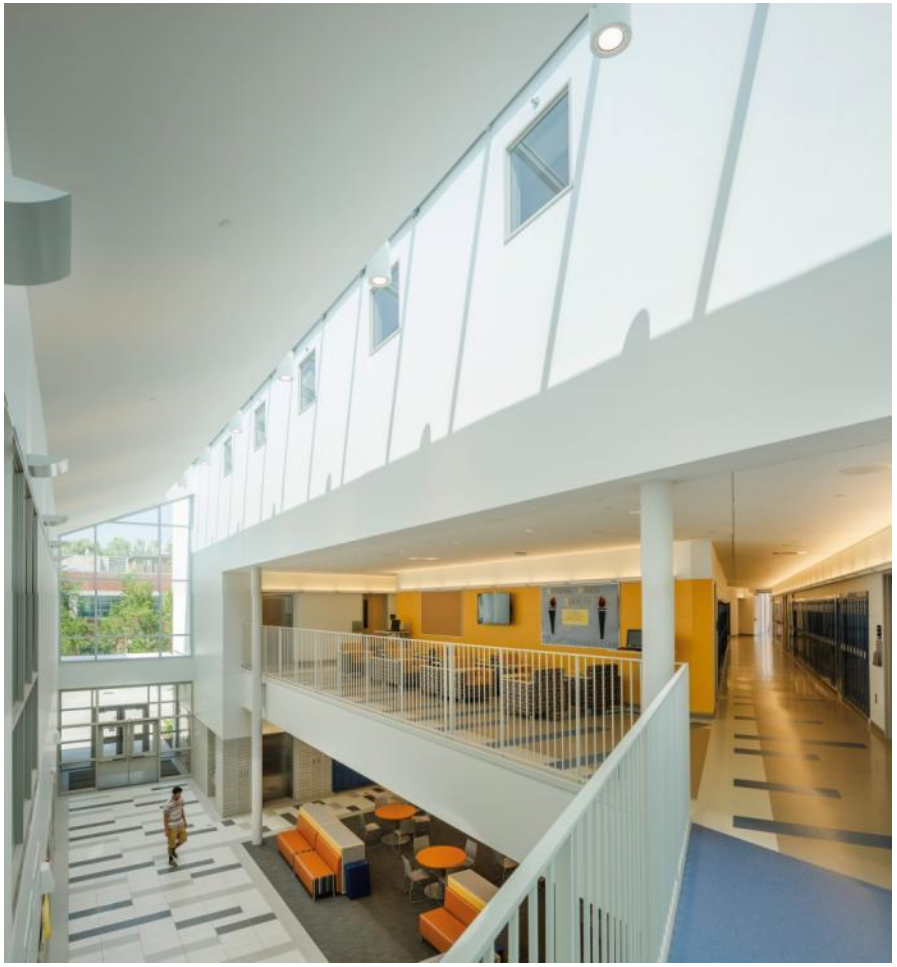
Educational Programming | Learning Modalities

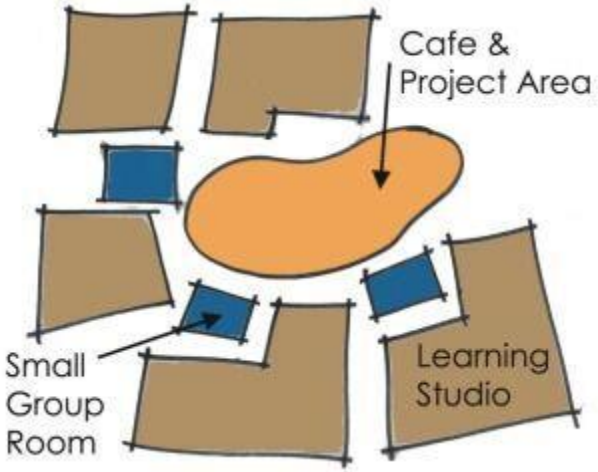


Source: Focus group sessions conducted by Fielding Nair for Billings Public Schools in 2011.

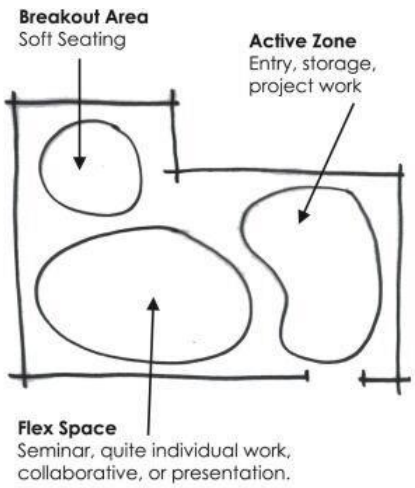
Educational Programming | Learning Modalities

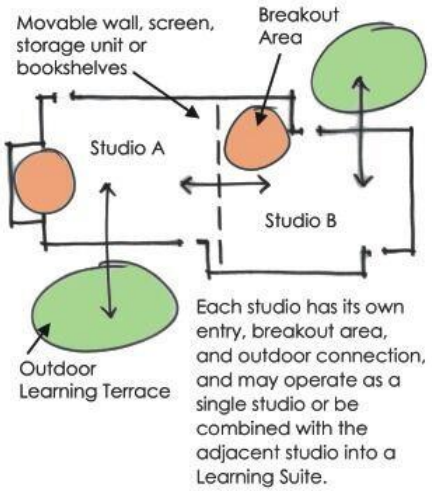
Educational Programming | Breakout Areas



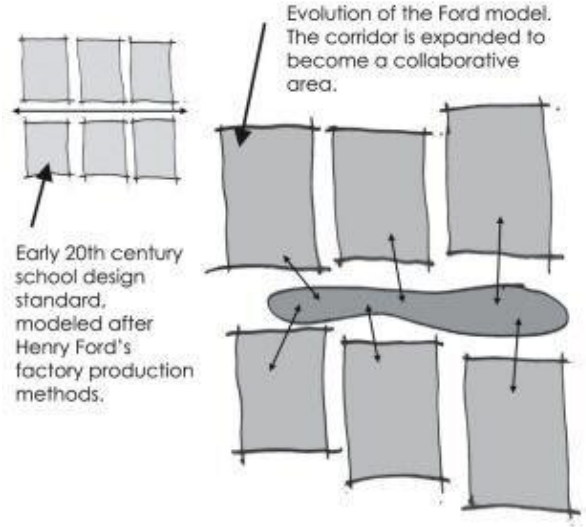


Educational Programming | Variety of Spaces





Educational Programming | Multi-Use Corridors



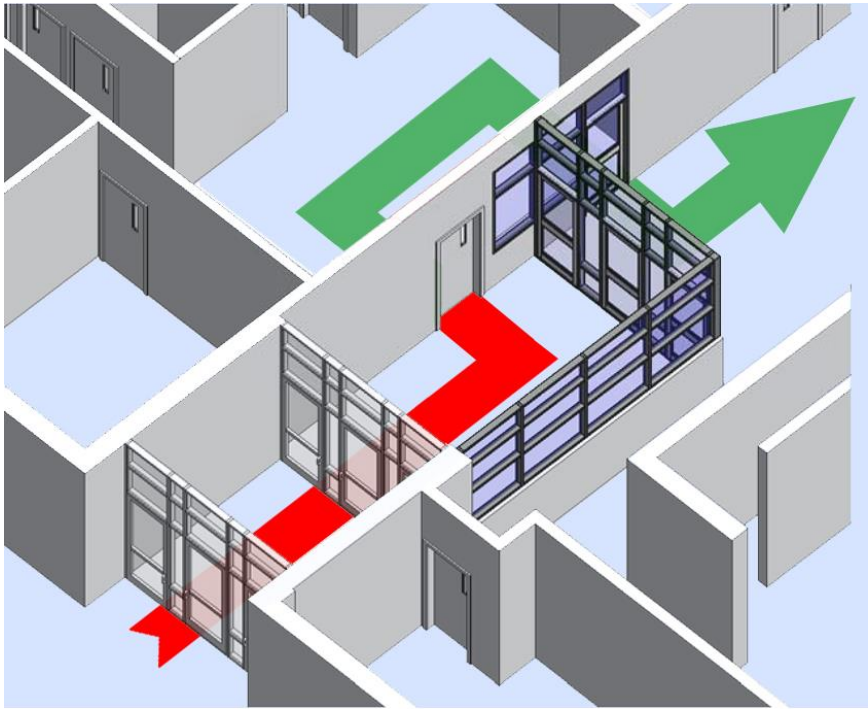
Educational Programming | Outdoor Learning

Educational Programming | Moveable Furniture

Design for Security | Controlled Environments

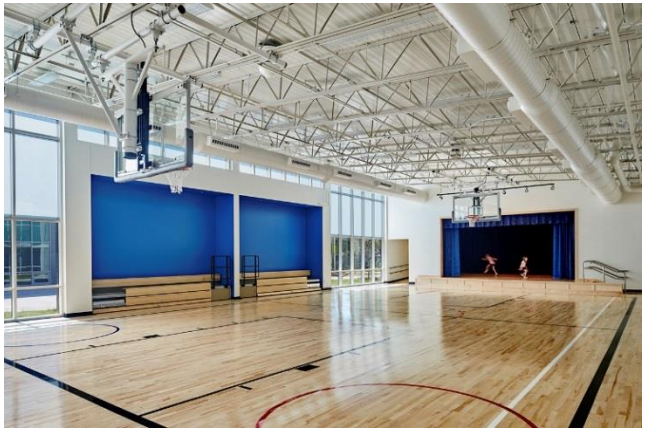
The Challenge is to Balance Security Concerns with the Overarching Goal of Providing a School Building that will Welcome and Inspire Children.

- Working Directly with First Responders
- Bring in an Expert Early in the Process
- Combination of Active and Passive Design Features
- Be Aware of Sight Lines
- Finding the Right Answers for your School & Community.



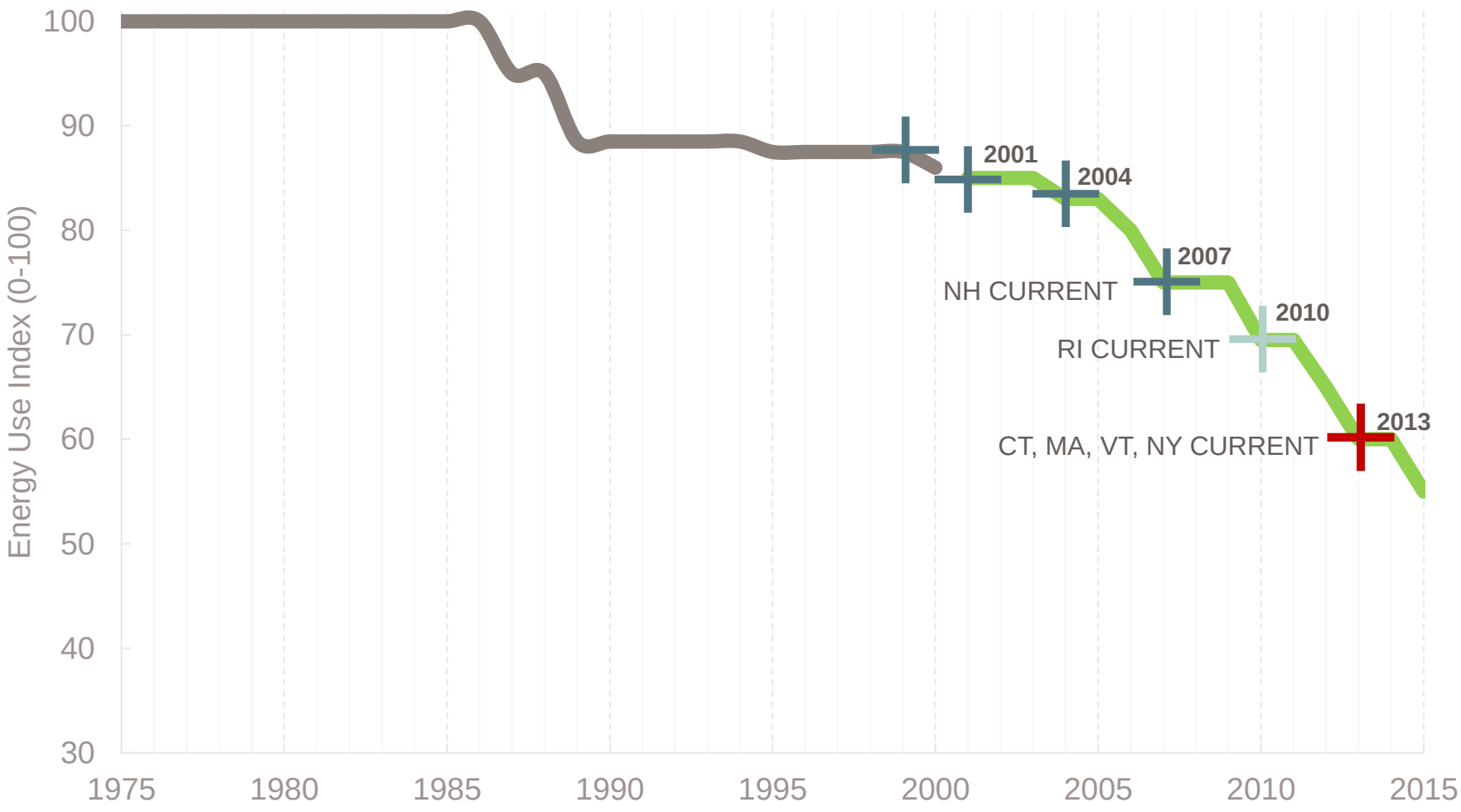
Sustainable Design | Experience

- Greene-Hills K8 School
- Victoria Soto Elementary School
- Guilford High School
- Stamford Environmental Magnet
- Wintonbury Early Childhood
- Fairfield Woods Middle School
- Waddell Elementary School
- Verplanck Elementary Schools
- Kingswood Oxford School

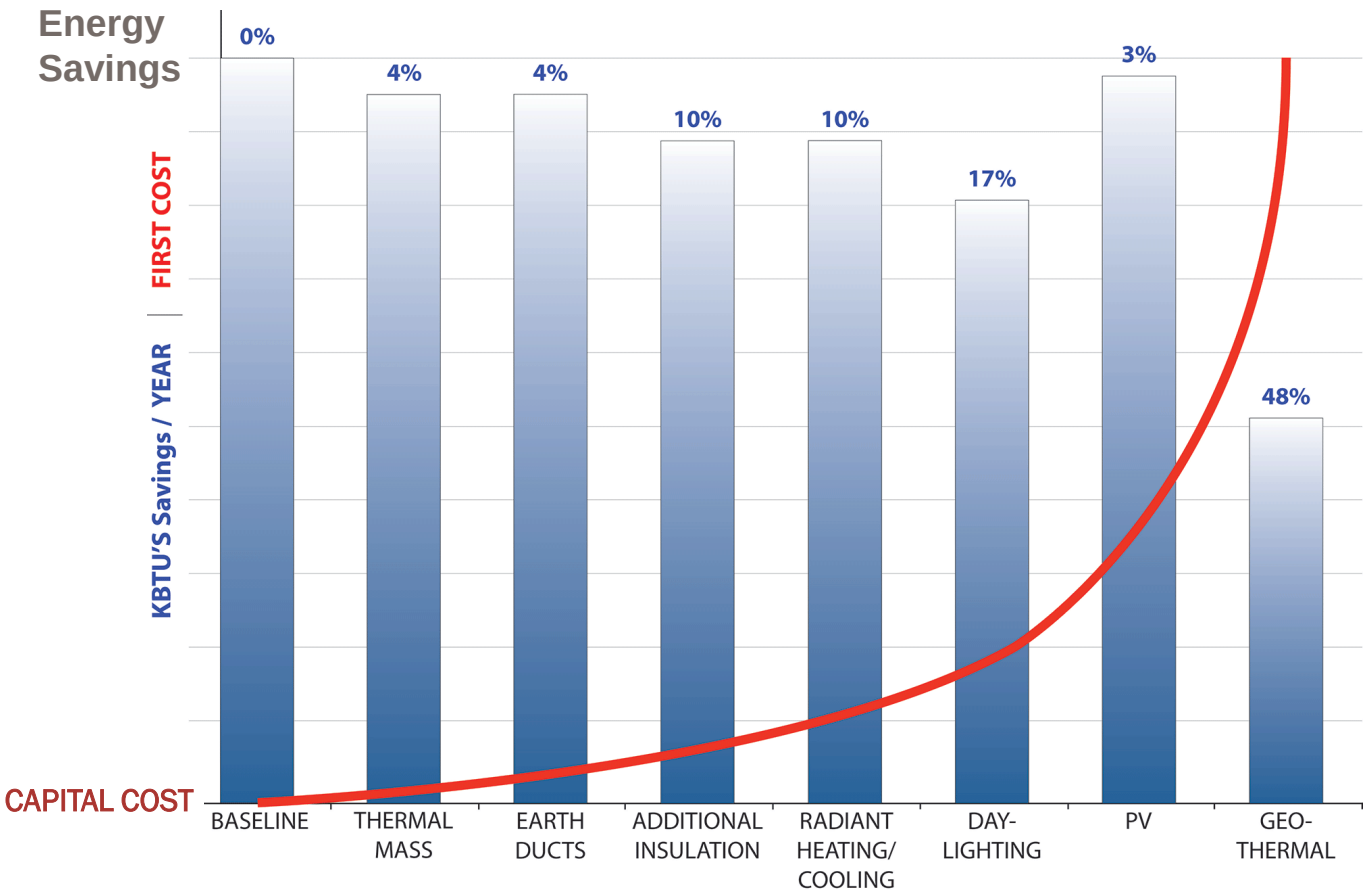


Green Design | Energy Code & Net Zero

ASHRAE 90.1-2013 | IECC 2015



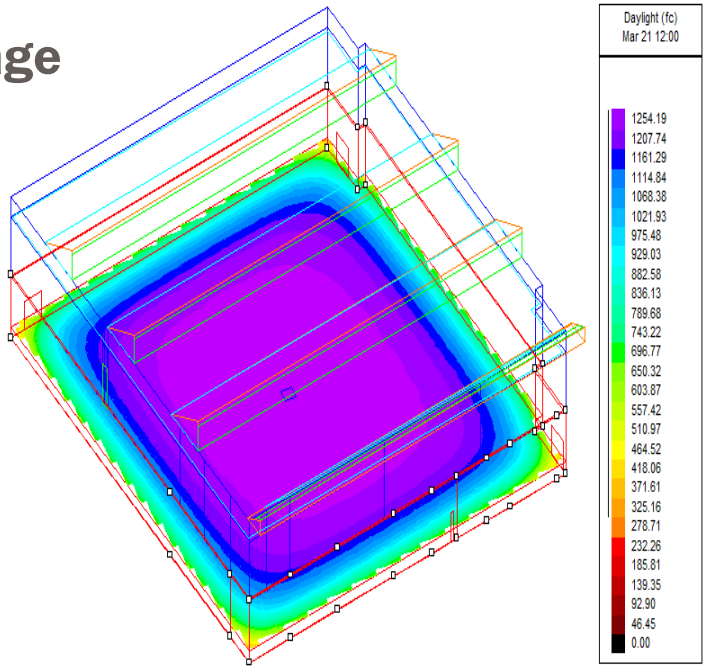
8 Sustainable Design | Energy



Payback:	3.6 yrs	11 yrs	4.8 yrs	2.3 yrs	1.8 yrs	25 yrs	11.6 yrs
Cap Cost:	$35,000	$118,000	$114,000	$145,000	$249,000	$276,000	$1,767,000

Sustainable Design | New Educational Facility

- **Envelope**
- **Daylighting + LED Lighting**
- **Radiant Floor Heating + Cooling**
- **Energy Recovery + DCV**
- **Cogeneration**
- **Thermal Ice Storage**



Radiant Heating/Cooling Floors Installation

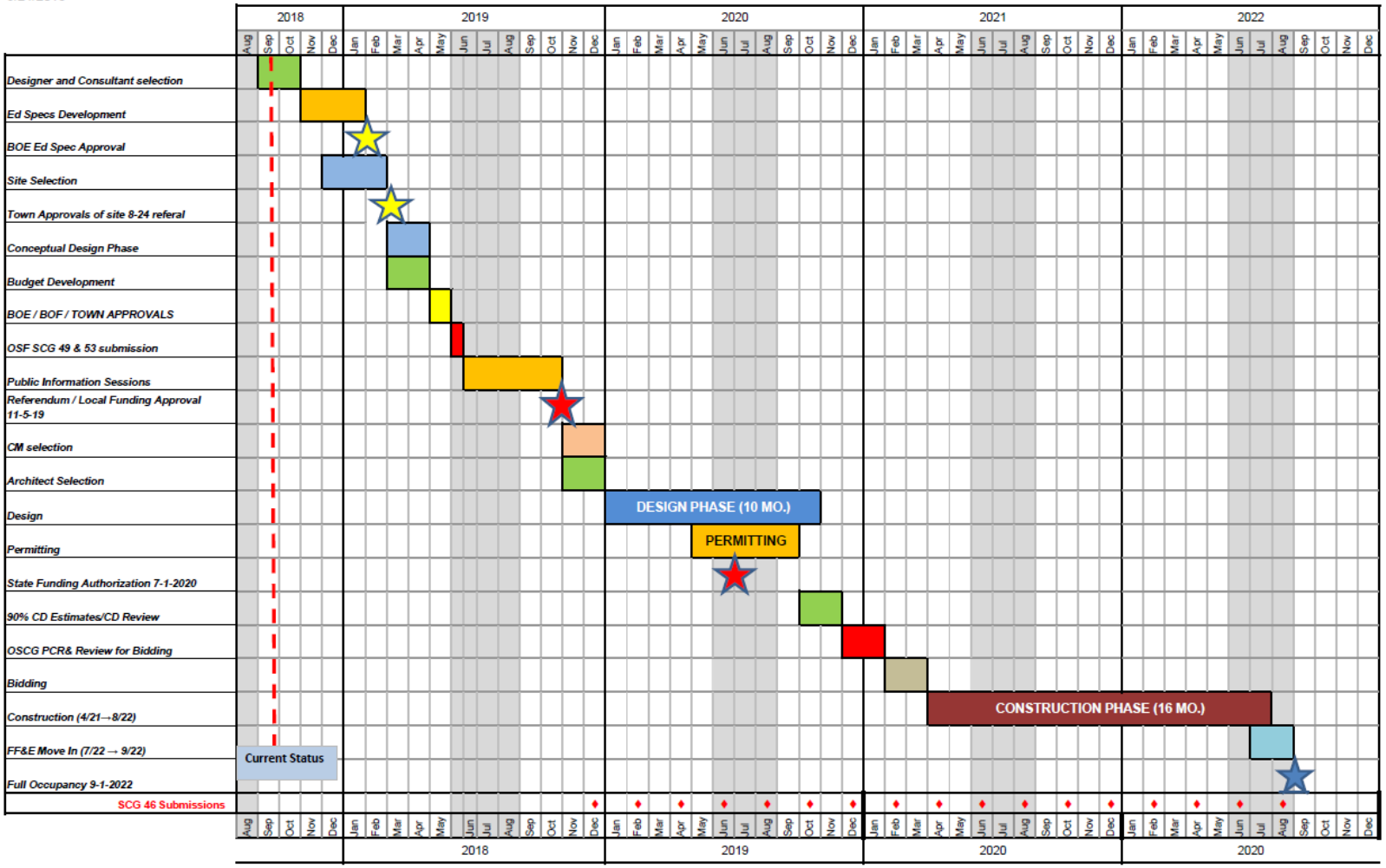
KOHLER RONAN, LLC
CONSULTING ENGINEERS

DRAFT

Project Schedule | Major Tasks

Appendix - B

Mansfield Public Schools
conceptual schedule
9/21/2018



Q & A | Conclusion