



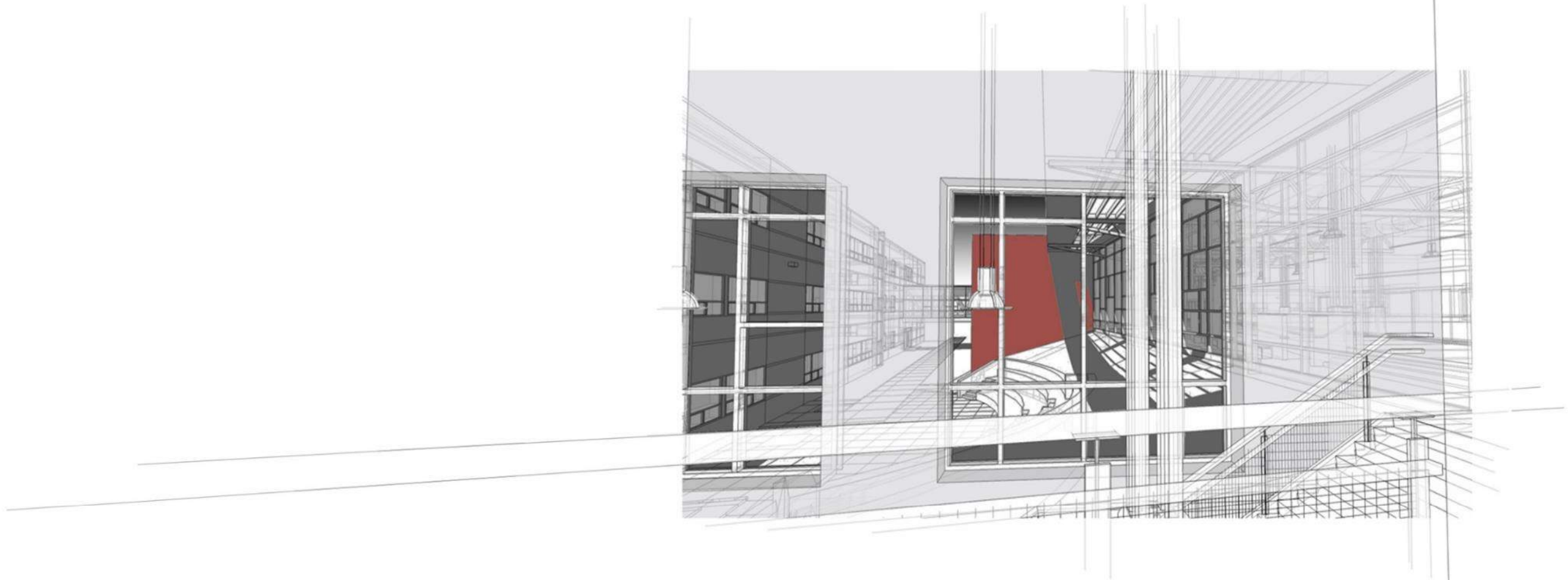
Crabtree, Rohrbaugh &
Associates - Architects

THE SCHOOL DISTRICT OF PHILADELPHIA



Found Opportunities:

Discovering a Sustainable Vision through
Collaboration for the Learning Environment



We live for the most part in closed rooms. These form the environment from which our culture grows. Our culture is to a certain extent the product of our architecture. If we want our culture to rise to a higher level, we are obliged, for better or for worse, to change our architecture. And this only becomes possible if we take away the closed character from the rooms in which we live.

~Paul Scheerbart, 1914

MORNING HUMOR



FAVORITE SUPER HERO?

SUPER
VILLIANS?

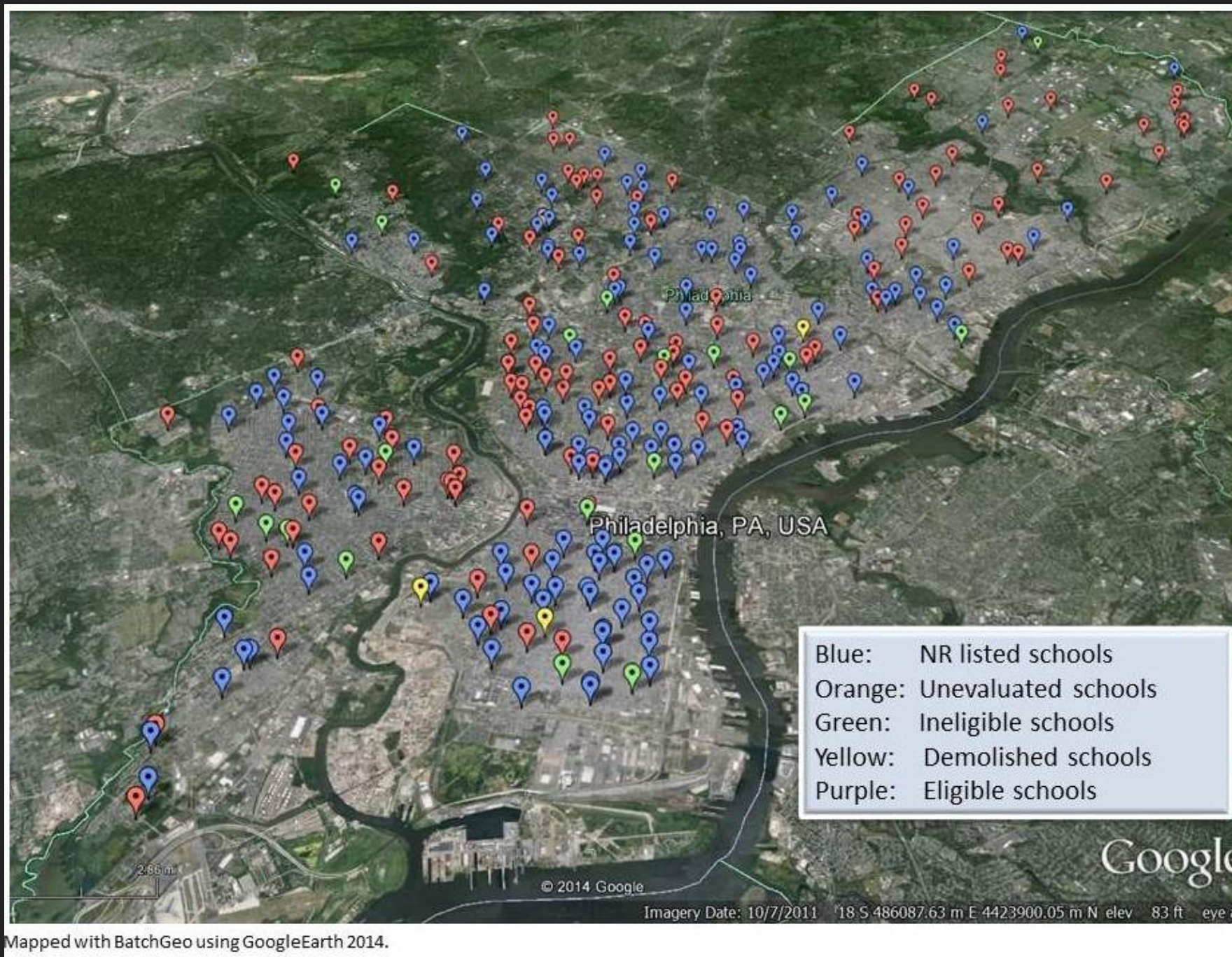




**SCHOOL DISTRICT
BACKGROUND**



THE SCHOOL DISTRICT OF PHILADELPHIA



UNDERSTANDING SCALE

202,538 Students-

8th Largest School District
in the Country

18,476 Active Employees

Including 8,700 Teachers

326 Schools District-Wide

Schools	District	Charter
Elementary	49	11
Elementary - Middle	99	34
Elementary-Middle - High	1	15
Middle	16	6
Middle - High	10	7
High School	67	11



CAPITAL PROGRAMS HISTORY

2003 ~ 2011

\$1.8 BILLION IN CONSTRUCTION

New Construction for
4 New High Schools
4 New K-8 Facilities
1 New Elementary School (K-4)
Added Additions to
1 High School
1 Middle School
5 K-8 Facilities
Major Renovations to 5 schools
3 New Primary Education Centers
Classroom Modernizations to 27 K-8 Schools
Various life cycle and system replacements

2018 - TODAY

\$275 MILLION OF NEW BONDS

New Construction for
Solis-Cohen Elementary
Additions to
4 K-8 Facilities
Major Renovations to
2 High Schools
2 Middle Schools
1 K-8 Facility
Classroom Modernizations to 38 Schools
for Early Literacy in PK – 3rd Classrooms
Incorporation of Additional Science Labs
System of Great Schools (SGS) – 6 Schools

Philly school buildings need nearly \$5B in repairs, new report says

by Kristen A. Graham, Posted: January 26, 2017

For the first time in 14 years, the Philadelphia School District has assessed the state of its aging buildings, and the results are staggering: The system identified more than 12,000 outstanding repairs.

It would cost nearly \$5 billion to do the work. Officials predict that they will need to spend \$3 billion in the next 10 years to address urgent problems.

Because of delayed maintenance, close to three-quarters of city schools are in poor repair, and a third of all schools are in such bad shape that they are "outside the sustainable funding range." Engineers recommend that some of these be replaced or closed in the coming years.

District officials said repair or closure recommendations for some buildings were not a prediction of school closings, only a statement of building conditions.

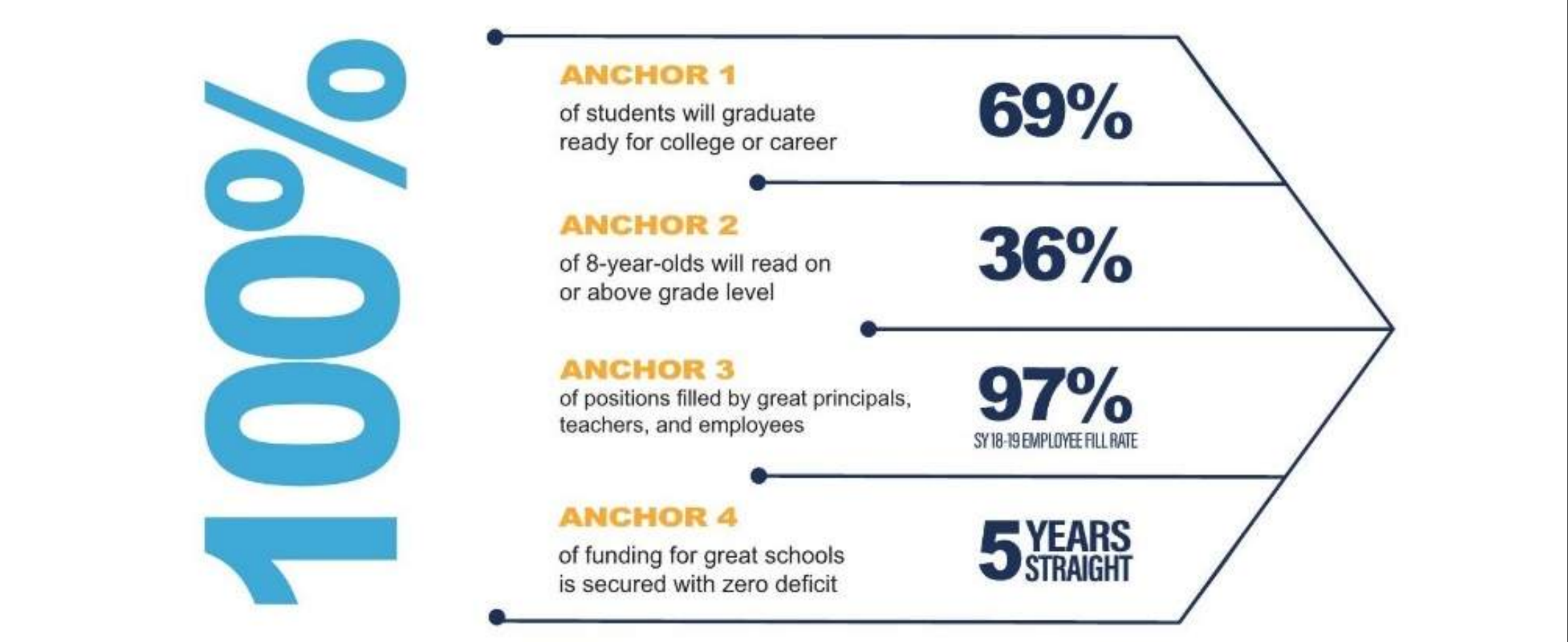
2011 ~ 2018

CAPITAL PROGRAMS & DISTRICT ANALYSIS

Repair to building envelopes including roofs, windows, etc
Incorporation of additional Science and CTC Programs

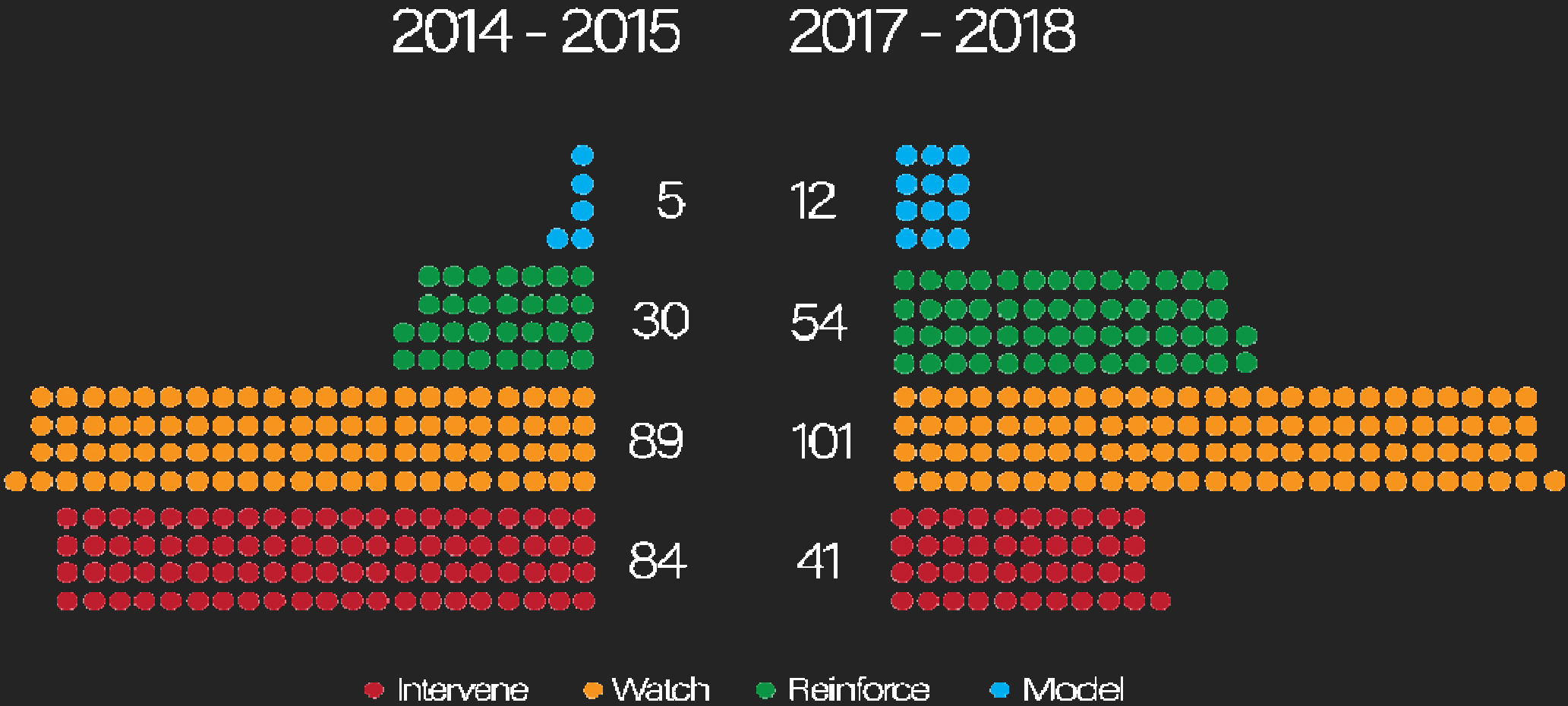
School Relocations
School Closings (32 Programs, 24 Schools)
Overall District Reorganization

FOUR ANCHOR GOALS



“Our anchor goals are set to 100% because every child deserves a high-quality education. They underscore our belief that all students can achieve, and they focus our work to ensure that we are creating great schools in every neighborhood.”

SCHOOL PROGRESS REPORT



Data visualization of school progress to date, showing **50 percent fewer lower performing schools and two times the number of higher performing schools.**

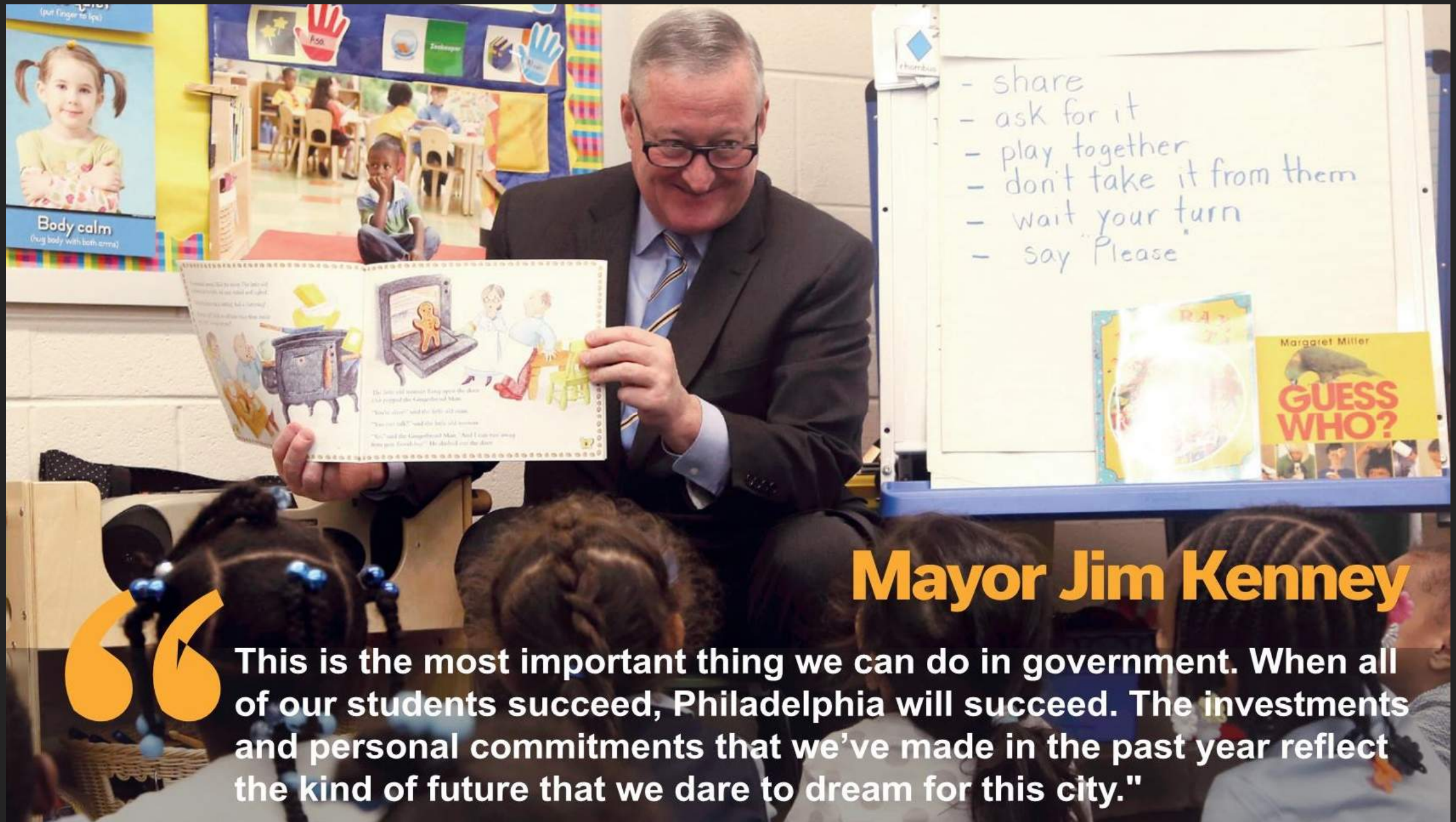




Our role in this work is ensuring that all children have the skills they need to be successful in school and beyond, so that one day, they will create opportunities to support future generations of children learning, growing, and thriving in our schools and city."

Superintendent Hite





Mayor Jim Kenney

This is the most important thing we can do in government. When all of our students succeed, Philadelphia will succeed. The investments and personal commitments that we've made in the past year reflect the kind of future that we dare to dream for this city."

District-wide **financial stability and local control** of our schools are allowing us to make investments to improve the education our students receive. We've transformed classrooms across the city into modern learning spaces with state-of-the-art technology and the services that support students and families.



SUSTAINABLE VISION



GREENWORKS PHILADELPHIA

A VISION FOR A SUSTAINABLE PHILADELPHIA



energy



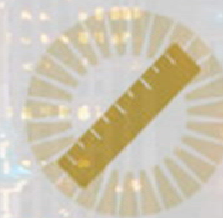
environment



equity



economy



engagement



In 2009, the Office of Sustainability began a comprehensive vision for a sustainable Philadelphia. The Greenworks Plan has guided efforts by local government and partners throughout our community to develop plans, carry out programs and work together to make Philadelphia a more sustainable city.

2016

RELEASE OF GREENWORKS 2016 PLAN



REBUILDING COMMUNITY INFRASTRUCTURE

Investment in improving libraries, recreation centers, and other neighborhood assets throughout Philadelphia

2017

LITTER PLAN

Comprehensive strategy to reduce litter citywide

ENERGY MASTER PLAN

Analysis of municipal government energy management and citywide energy policies toward reducing carbon emissions 80 percent by 2050

SHARED FOOD METRICS

Establish a set of goals to assess progress of food system work in Philadelphia

GREENWORKS EQUITY INDEX

Data-driven interventions to help communities

2018

TRANSPORTATION MASTER PLAN

Citywide effort centered on transportation's impacts on racial equity, climate and resilience, and community health



2019+

LOOKING FORWARD

OOS and city partners will continue to identify opportunities and develop strategies to meet the Greenworks visions



In 2014

22% of Philadelphians were food insecure.

Philadelphia buildings emitted 9.8 million metric tons of carbon pollution.

53,138 sensitive Philadelphians lived in hotter than average neighborhoods.

37% of Philadelphians chose a low-carbon commute.

Philadelphians generated 2.5 million tons of waste.

In 2015 Philadelphia had 16 unhealthy Air Quality Index (AQI) days.

As of June 2016, Philadelphia has installed green stormwater infrastructure that catches raining falling on 838 acres.

VISION 1



All Philadelphians have access to healthy, affordable, and sustainable food and drinking water

VISION 2



All Philadelphians breathe healthy air inside and outside

VISION 3




All Philadelphians efficiently use clean energy that they can afford

VISION 4



All Philadelphians are prepared for climate change and reduce carbon pollution

VISION 5




All Philadelphians benefit from parks, trees, storm-water management, and healthy waterways

VISION 6



All Philadelphians have access to safe, affordable, and low-carbon transportation

VISION 7



All Philadelphians waste less and keep our neighborhoods clean

VISION 8



All Philadelphians benefit from sustainability education, employment, and business opportunities

GREENWORKS VISIONS

Residents from 92% of Philadelphia's zip codes participated in updating Greenworks in 2016.

THE CITY



Food and water are basic human needs.



Clean air is fundamental to the health of our residents and city.



Using **cleaner energy** more efficiently will save money and **reduce urban carbon pollution**.



The usual weather conditions in Philadelphia are getting **warmer, wetter and more extreme**.



Green, natural spaces improve our mental and physical health, keep our air and water clean and contribute to safer and stronger communities.



A **robust transportation network is critical** for Philadelphia's residents and businesses.



To eliminate all waste in Philadelphia we must significantly **reduce the amount of trash** we create and increase the amount we reuse and recycle.



Creating a sustainable city depends on our ability to educate and **engage both current leaders and next generation of sustainability stewards**.

THE SCHOOL

Design includes an **outdoor science classroom dedicated to growing food** and educating elementary students.

Anticipated **36% reduction in water use** beyond code standards.

Conducting **indoor air quality testing** during and after construction.

236kW Solar Array on roof and anticipated **46.5% reduction in energy usage** beyond code standards.

Use of **white TPO roof and concrete in lieu of black asphalt** to dramatically reduce heat-island effect.

Green, natural spaces and play areas incorporated on-site including outdoor learning areas.

The site includes **several walkways and bike paths** and easy access to nearby bus stops to encourage sustainable transportation and physical activity of students.

More than **75% of waste to be recycled during construction and District-wide recycling program implemented**.



For Solis-Cohen Elementary, education and community engagement occurred at all stages of design and the school was created to encourage and develop all aspects of sustainability into the daily life of the students.

IN THE KNOW

Inspiring the Next Generation of Sustainability Leaders

Motivated and involved young people are the foundation of a sustainable Philadelphia, today and tomorrow. Read on to find out how the School District of Philadelphia is leading on sustainability and what books might interest the budding environmentalist in your life.

Philadelphia's Green Ribbon School District

What does the GreenFutures plan have in store for Philadelphia public school students?

Last May the School District of Philadelphia was one of nine districts nationwide to receive the U.S. Department of Education's Green Ribbon Schools sustainability award. The award recognizes schools around the country committed to innovative efforts to reduce environmental impact and utility costs, improve health and wellness, and ensure effective sustainability education.

In Philadelphia, that means implementing the District's first-ever comprehensive sustainability plan, *GreenFutures*. The plan launched in 2016 and has already made progress across its five focus areas (see sidebar to the right). Stay tuned for the first annual GreenFutures Progress Report later this year, which will outline why it's no surprise the School District of Philadelphia is already receiving national recognition for its sustainability efforts.★

PHOTO BY JENNA SPARR; COURTESY OF THE TRUST FOR PUBLIC LAND



Green schoolyards can transform the way children play, move, and learn. They also have a role in achieving the city's targets for sustainability, wellness, and stormwater management. A strong network of community leadership and resources is emerging in Philadelphia to support schoolyard transformation. To learn about resources to help you green your local schoolyard, check out the Community Design Collaborative's *Transforming Philadelphia's Schoolyards* guide.





SOLOMON SOLIS-COHEN ELEMENTARY SCHOOL



GETTING FROM THERE TO HERE







S. SOLIS-COHEN PUBLIC SCHOOL

PROJECT UNDERSTANDING

EXISTING CONDITIONS

SOLOMON SOLIS COHEN ES

- Grades 1-5
- Approx. 97,000 sq.ft.
- Constructed between 1948-1954

PRIMARY EDUCATION CENTER

- Approx. 24,325 sq. ft.
- Grades K-1
- Enrollment 1300 students
- 30% English Speaking other Languages (ESOL) Students
- 12 acre site

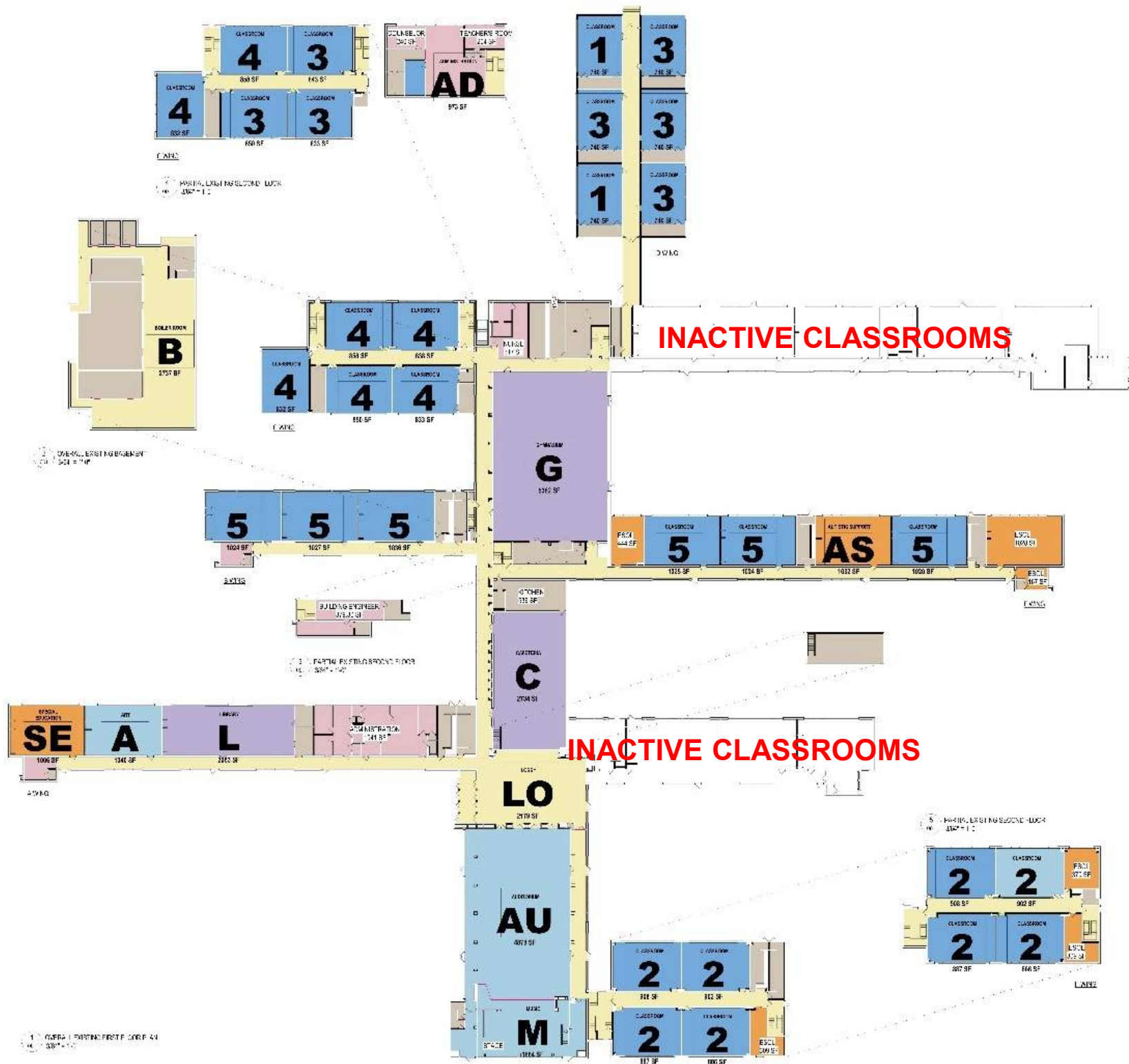




CONNECTION TO LOCAL NEIGHBORHOOD - 2 STORY BUILDINGS



MIXTURE OF STONE & BRICK - 2 DOMINANT MATERIALS



EXISTING S. SOLIS-COHEN ELEMENTARY SCHOOL

97,000 SQUARE FEET

CONSTRUCTED 1948

34 ACTIVE CLASSROOMS

8 INACTIVE CLASSROOMS

LIMITED PREP CLASSROOMS & STORAGE

ONE STORY & LONG TRAVEL WITHIN SCHOOL

3 CONSTRUCTION PERIODS

NO CONNECTION TO PRIMARY EDUCATION CENTER

Our Mission

Our Solis-Cohen Learning Community is...

DEDICATED to achieving academic excellence.

DEVOTED to providing our culturally diverse community with a safe and supportive environment where student achievement is our focus.

COMMITTED to developing a community of life long learners who can thrive in an ever-changing global economy.



Sharp-eyed worker discovers Solis-Cohen Elementary is crumbling

by [By Kristen A. Graham, Inquirer Staff Writer](#), Posted: September 2, 2015

Hundreds of students who attend Solis-Cohen Elementary in the Northeast will not be able to start their school year on time due to serious structural problems at the building.

The building at 7001 Horrocks St. was recently discovered to be structurally unsound, Philadelphia School District spokesman Fernando Gallard confirmed.

The emergency repairs are part of an ongoing problem in the city school system, where many of the 200-plus buildings are old and in poor condition.

One district estimate put the unmet capital needs of the system at \$4 billion.

Ad closed by

Stop seeing

Why this ad



PROJECT UNDERSTANDING

PROJECT GUIDING PRINCIPLES

- Reduce building footprint
- Provide a connection to PEC
- Improve site circulation
- Passive security design
- Improved site security
- Outdoor play space
- Increase cafeteria seating/service
- Daylighting and ventilation
- Proper site orientation
- Multi-story design



**MAXIMIZING
INVESTMENT**

Solis-Cohen Elementary



Proposed Educational Program- Schematic Design

Crabtree, Rohrbaugh & Associates Architects

Project No. 3066

5/30/2017 Update

Total Gross SF:			140,000 SF			97,023 SF	Once building floor plan is generated based upon Scheduled Areas, building net to gross factor can be determined. RFP Building Area was based upon 110,000 SF as a starting point.
Total Scheduled Area Net SF:			106,338 SF			62,995 SF	
Net to Gross SF =			1.32 SF			1.54 SF	
PDE Standard Net to Gross SF =			1.58 SF			1.58 SF	

			PROPOSED BUILDING			EXSITING BUILDING	NOTES
SCHEDULED AREA							
Academic Core Program			54,910 SF	40,828 SF			
	SF Standard	No. Rooms	Total SF	SF Standard	No. Rooms	Total SF	NOTES
General Education Classrooms		56	46,950 SF	45		38,034 SF	
English to Speakers of Other Languages (ESOL) Classrooms	900 SF	6	5,400 SF	387 SF	7	2,709 SF	900 SF space that divides into (2) 450 utilizing a Modernfold door.

**FINANCIAL &
PROGRAMMATIC CHALLENGE**

1,200-1,400 students

**Minimize Grossing Factor
Reduce Square Foot per Student**

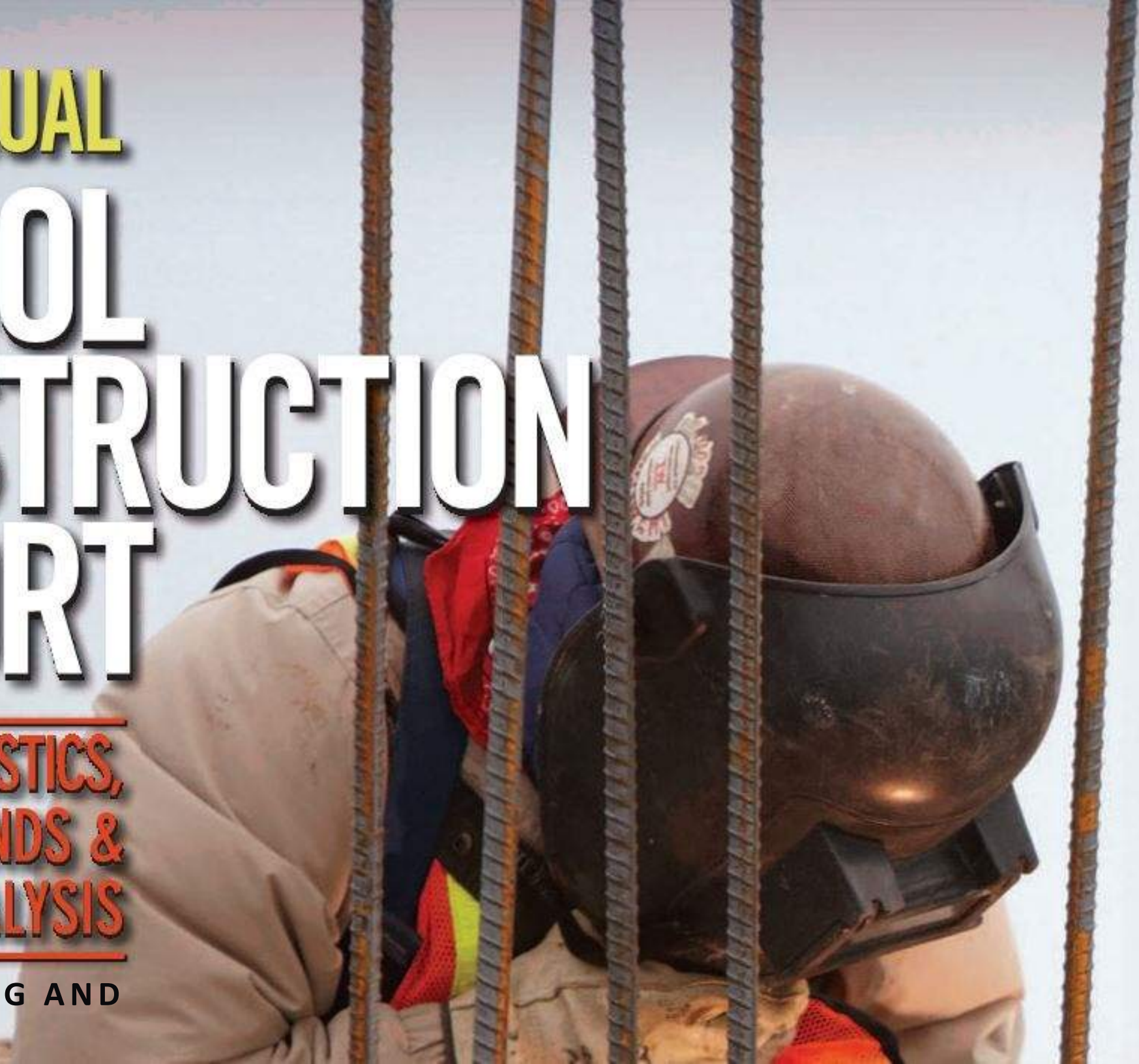
- Solis-Cohen Elementary School**
- 97-116 square feet/ student**

20TH ANNUAL

SCHOOL CONSTRUCTION REPORT

**NATIONAL STATISTICS,
BUILDING TRENDS &
DETAILED ANALYSIS**

**SCHOOL PLANNING AND
MANAGEMENT**



REGION 2 MEDIAN NEW SCHOOLS *(NJ, NY, PA)*

	Elementary	Middle	High
\$/sq. ft.	\$235.36	\$250.93	\$333.33
\$/student	\$43,083	\$57,940	\$63,120
Sq. ft./student	183.0	239.7	174.2
Students	602	785	600
Size (sq. ft.)	95,368	183,500	90,000
Total cost (\$000)	\$21,000	\$45,850	\$58,000

The median elementary school in Region 2 spent \$235.36 per student or just over \$43,000 for each of the 602 students accommodated. The median middle school cost \$45.85 million and housed 785 students. The median high school in the region cost \$58 million.



REGION 3 MEDIAN NEW SCHOOLS *(DC, DE, MD, VA, WV)*

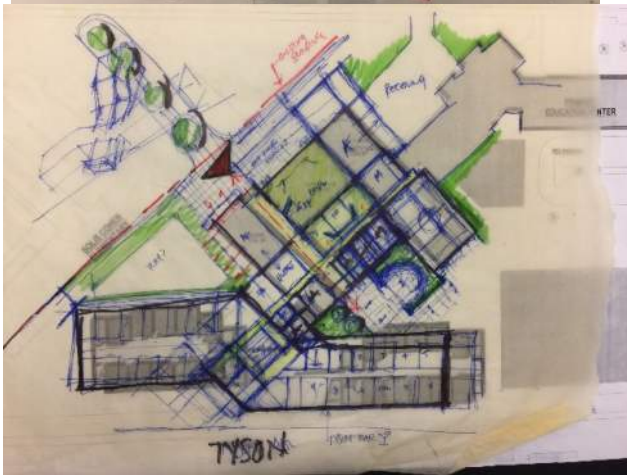
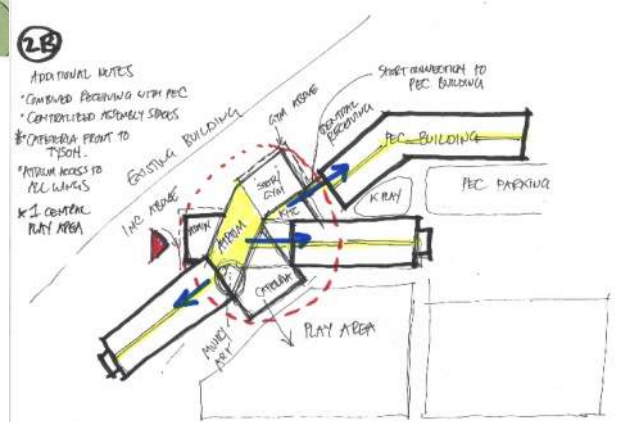
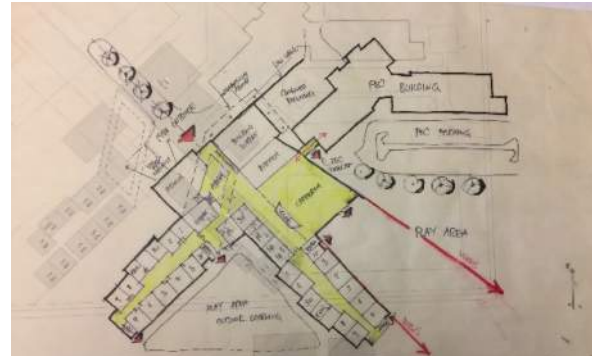
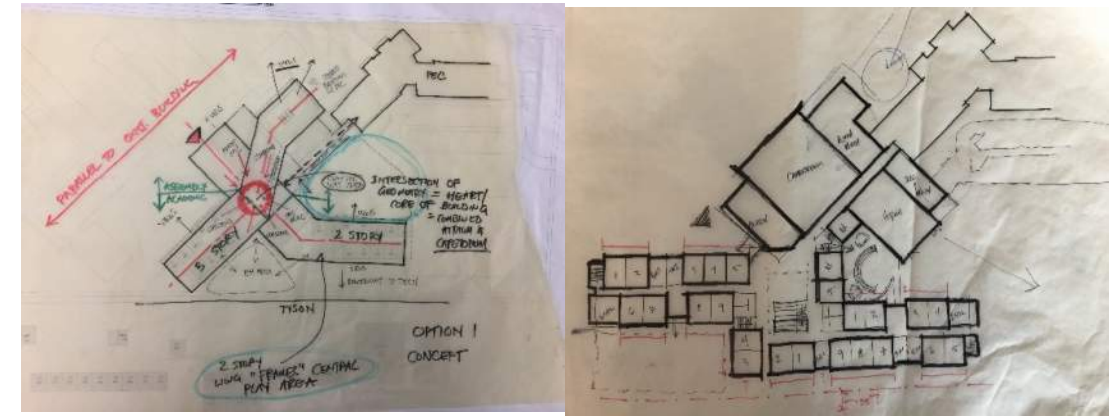
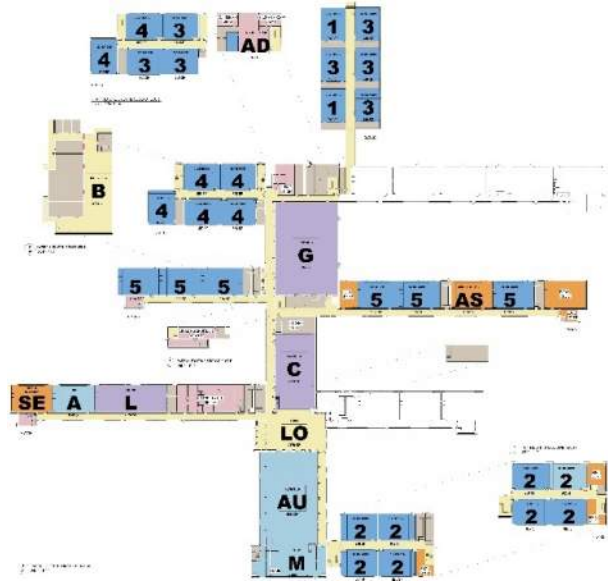
	Elementary	Middle	High
\$/sq. ft.	\$236.67	\$198.07	\$224.47
\$/student	\$59,102	\$46,879	\$63,333
Sq. ft./student	252.6	233.7	200.0
Students	700	450	1,345
Size (sq. ft.)	79,500	92,500	300,000
Total cost (\$000)	\$25,000	\$21,450	\$80,000

The median elementary school in Region 3 cost \$236.67 per square foot or \$59,102 for each of the 700 students accommodated. The median high school with 1,345 students was 300,000 square foot and cost \$80 million and provided 200 square foot per student.





I'm frustrated.

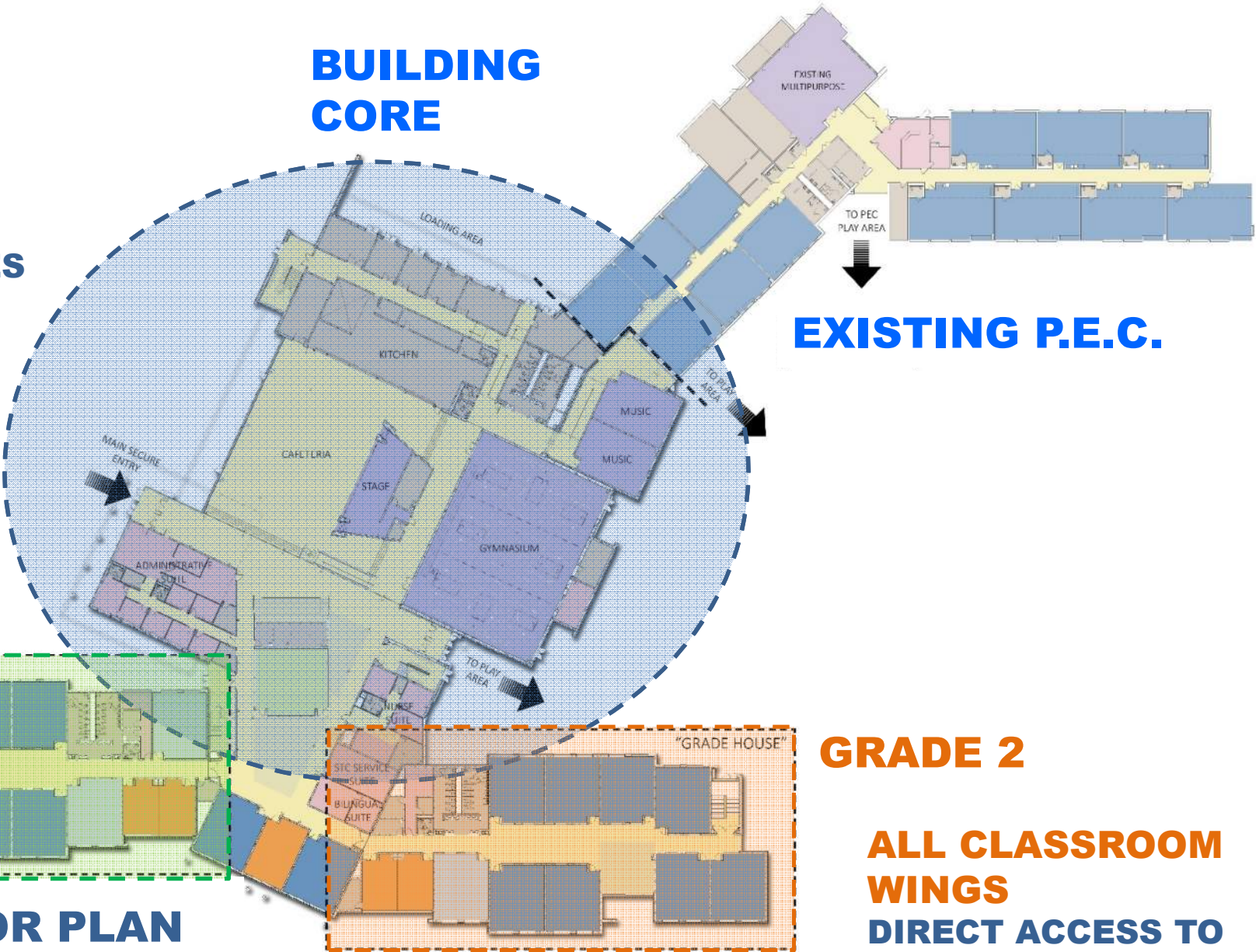


EVOLUTION OF BUILDING DESIGN WITH DESIGN TEAM, SDP AND S. SOLIS-COHEN ELEMENTARY

BUILDING CORE

- MAIN ENTRANCE
- CAFETERIA
- STAGE
- GYMNASIUM
- ADMINISTRATION
- STUDENT SERVICES
- LEARNING STAIR
- SCIENCE
- MUSIC

BUILDING CORE



EXISTING P.E.C.

GRADE 1

GRADE 2

ALL CLASSROOM WINGS
DIRECT ACCESS TO BUILDING CORE

FIRST FLOOR PLAN





Middletown Middle School, 2007

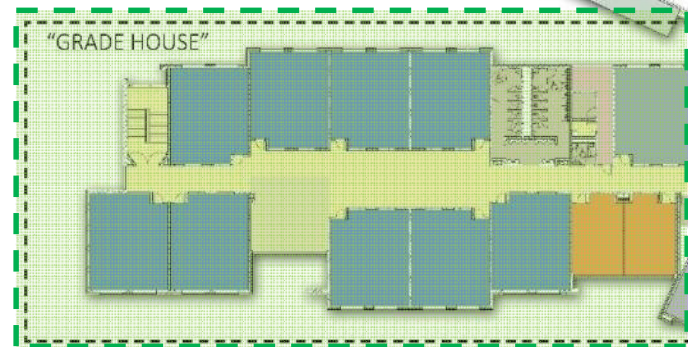


S. Solis-Cohen Open Cafetorium

BUILDING CORE

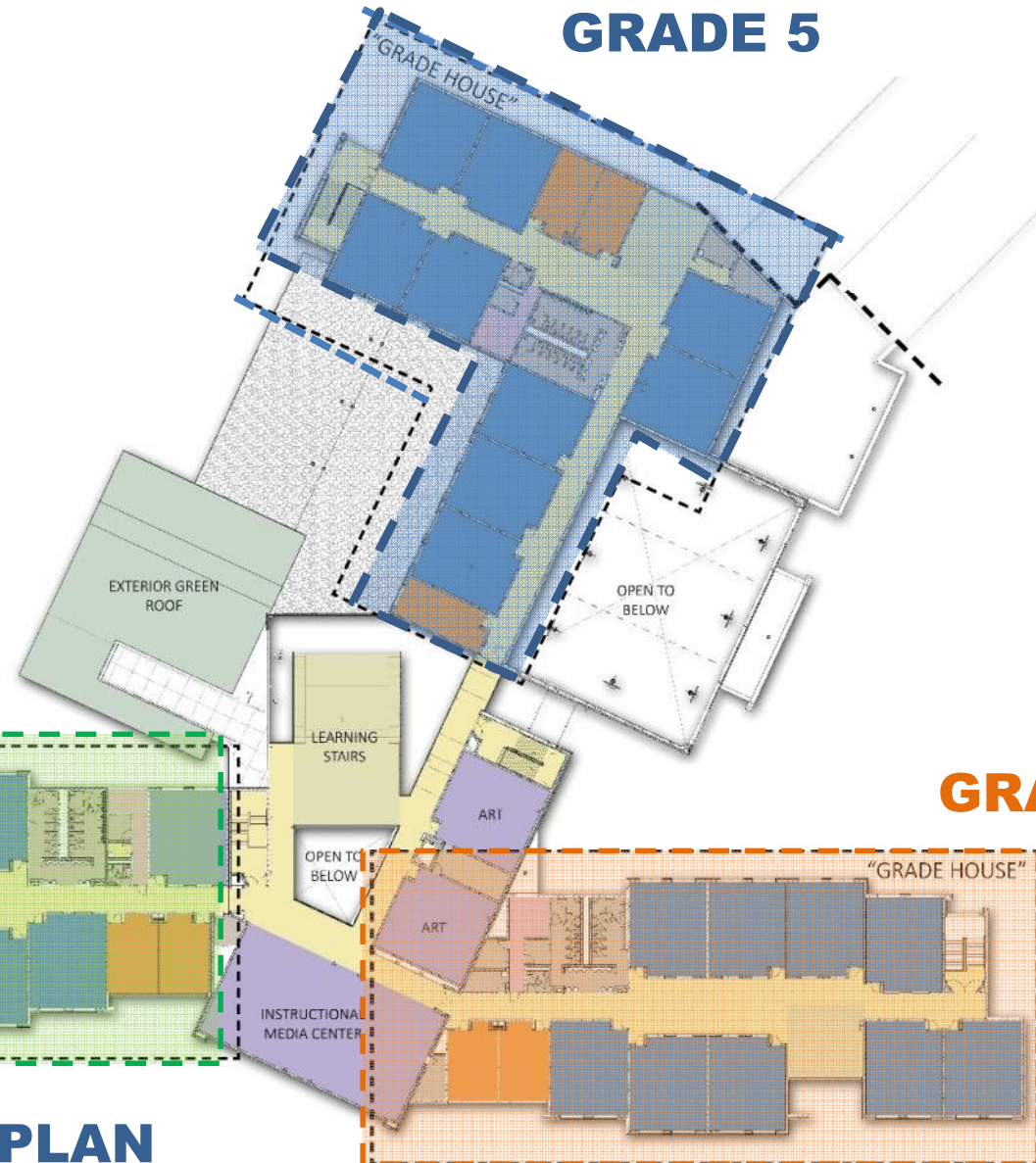
LEARNING STAIR
MEDIA CENTER
ART CLASSROOMS
EXTERIOR GREEN
ROOF

GRADE 3

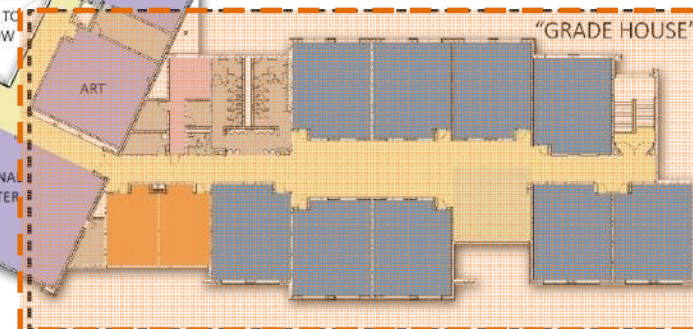


SECOND FLOOR PLAN

GRADE 5

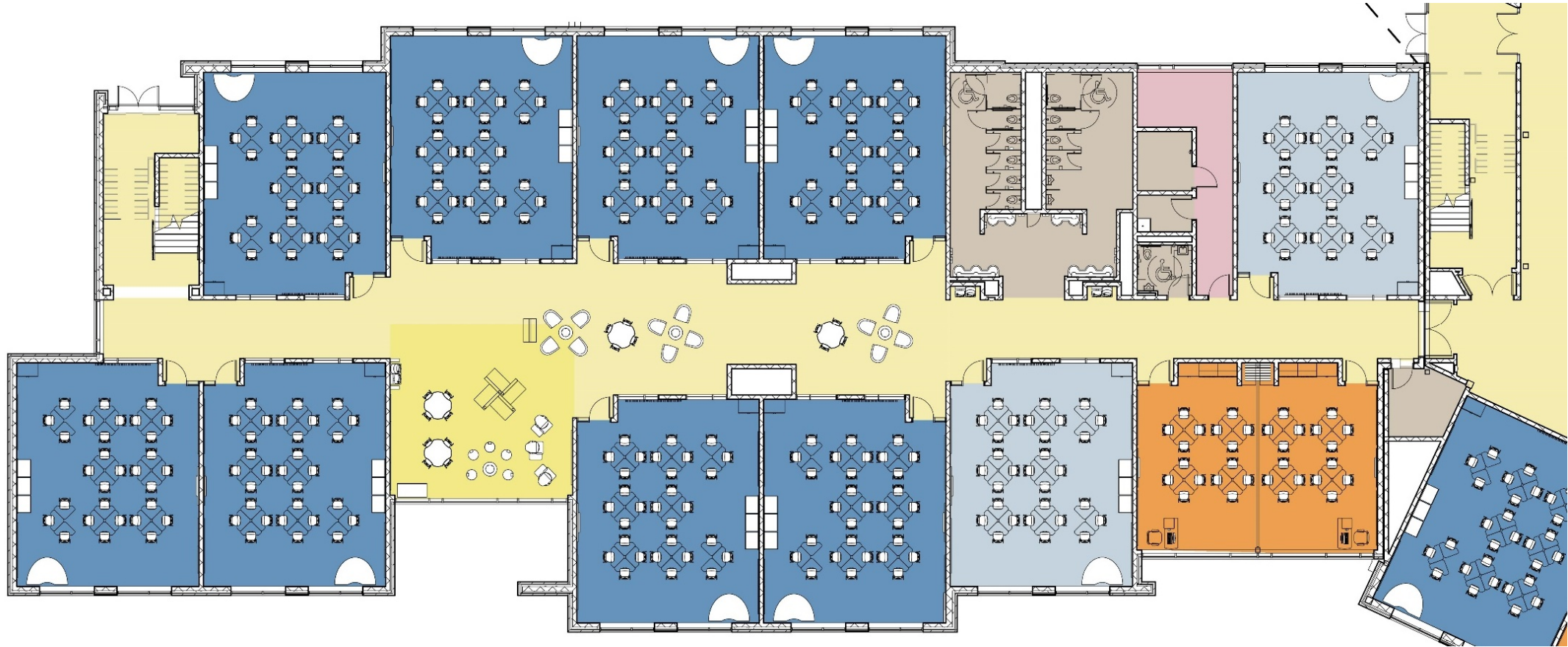


GRADE 4





S. Solis-Cohen Open Large Group Instruction



5 GRADE HOUSES

Each Grade House Includes

- 9 classrooms (Allowing overall scale of school to be brought down to a group of 240-280 students)
- Open Small Group Breakout Instructional Area
- 1 English Speaking other Languages Classroom
- Dedicated Storage & Restrooms
- Ability to secure entire classroom wing in the event of an emergency





ENTRANCE PLAZA (CLEAR SITE LINES & GATHERING SPACE)



2 STORY CLASSROOM WING ALIGNED WITH TYSON STREET & NEIGHBORHOOD



BUS DROP-OFF & FACULTY PARKING FROM HORROCKS STREET



CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

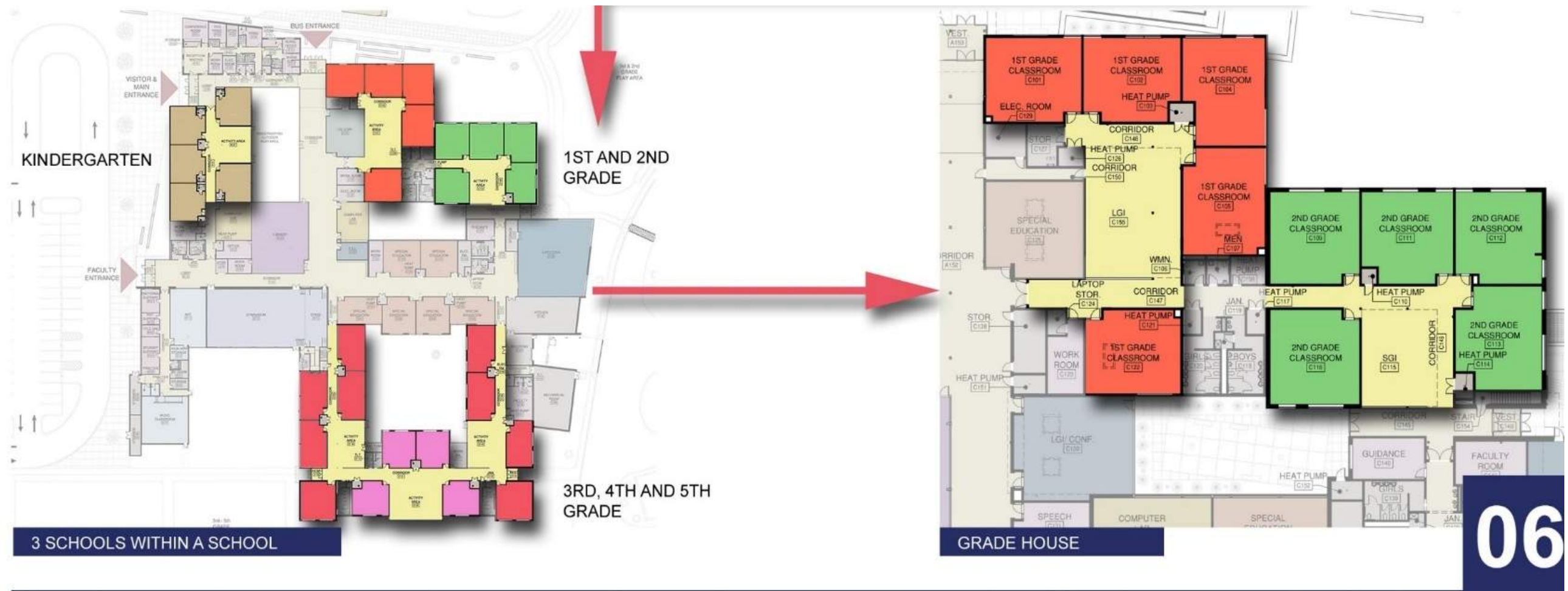
S. SOLIS COHEN ELEMENTARY SCHOOL
THE SCHOOL DISTRICT OF PHILADELPHIA



TALK ABOUT YOUR MISTAKES



TALK ABOUT YOUR LESSONS LEARNED



FOUR SCALES TO MIDDLEBURG ELEMENTARY SCHOOL

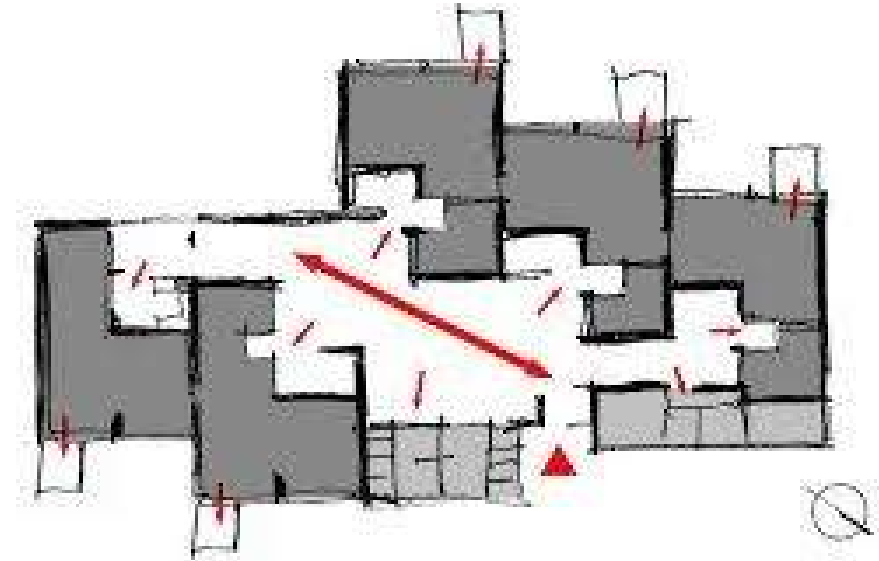
TALK ABOUT YOUR LESSONS LEARNED



**FURNITURE
VISUAL
CONNECTION TO
CLASSROOMS
VARIATION OF
SCALE**

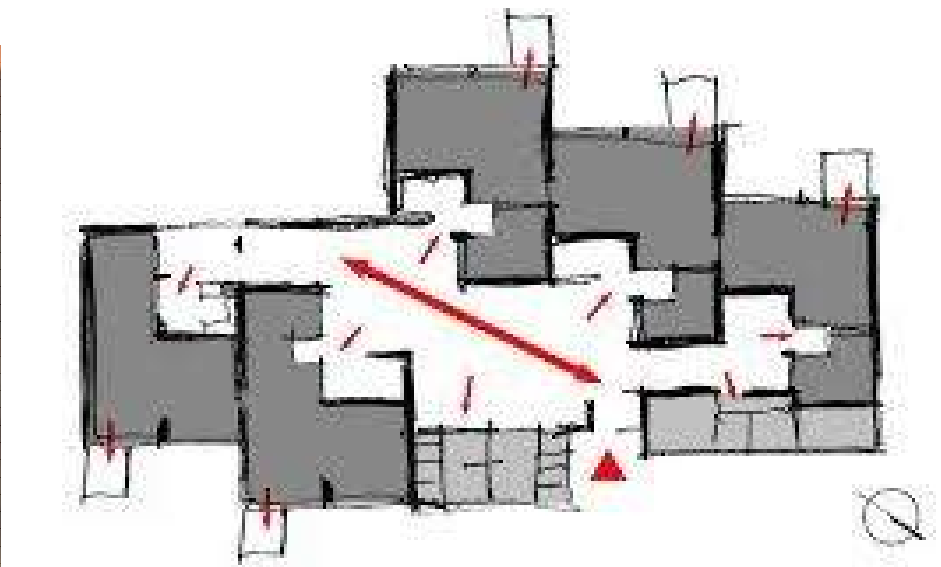


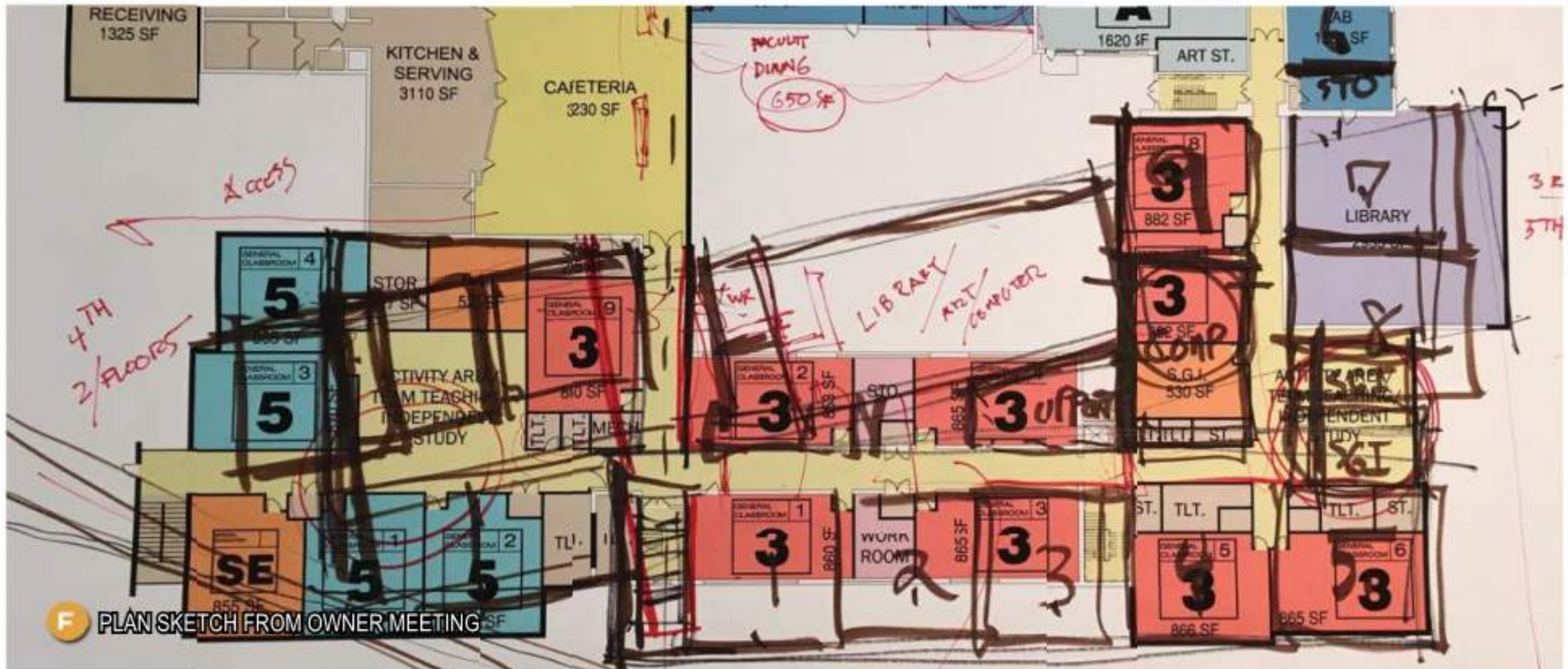
TALK ABOUT YOUR LESSONS LEARNED



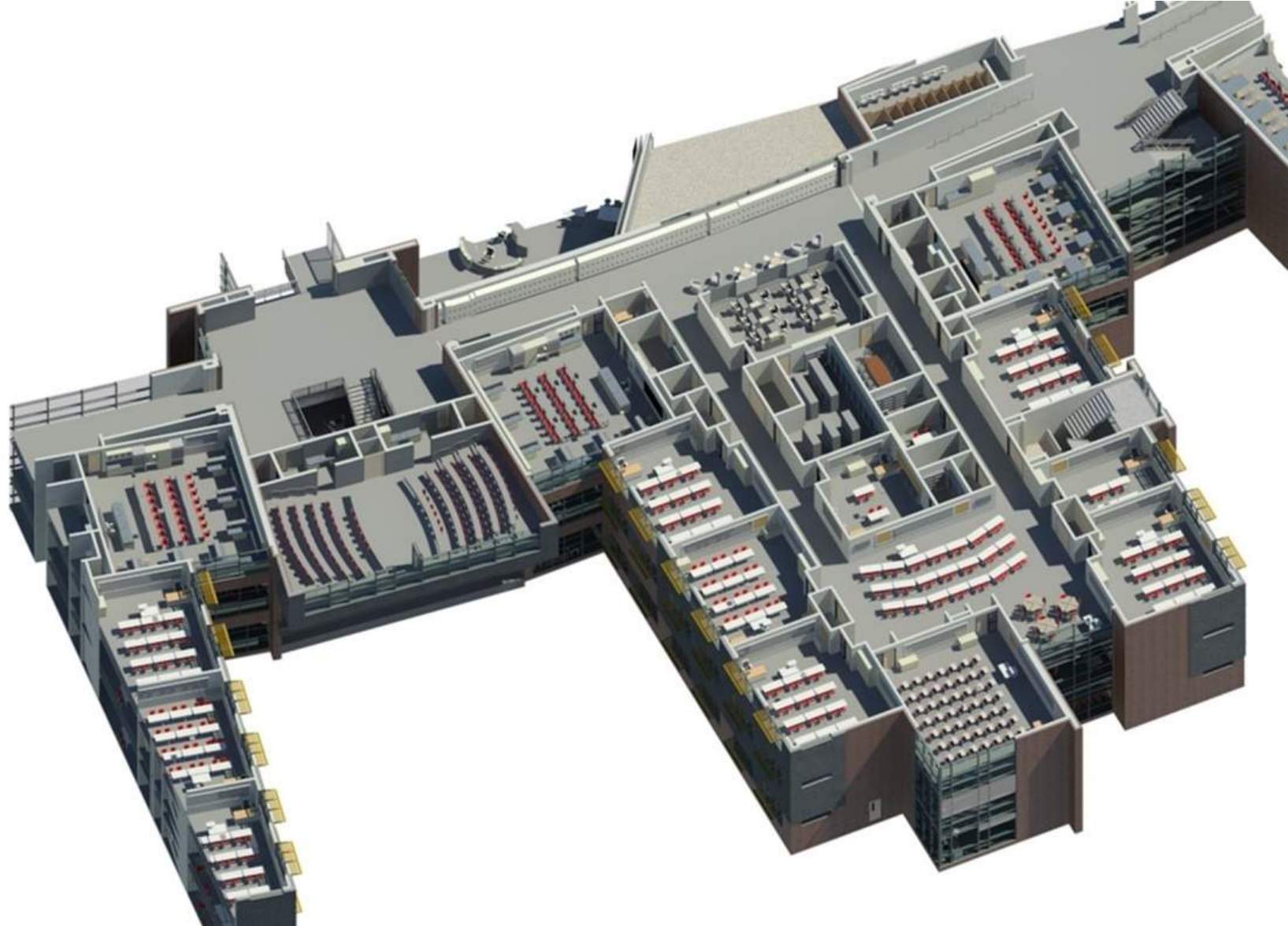
HERMAN HERTZBERGER- CEFPI LECTURE NYC 2012

TALK ABOUT YOUR LESSONS LEARNED





DOCUMENT EVOLUTION

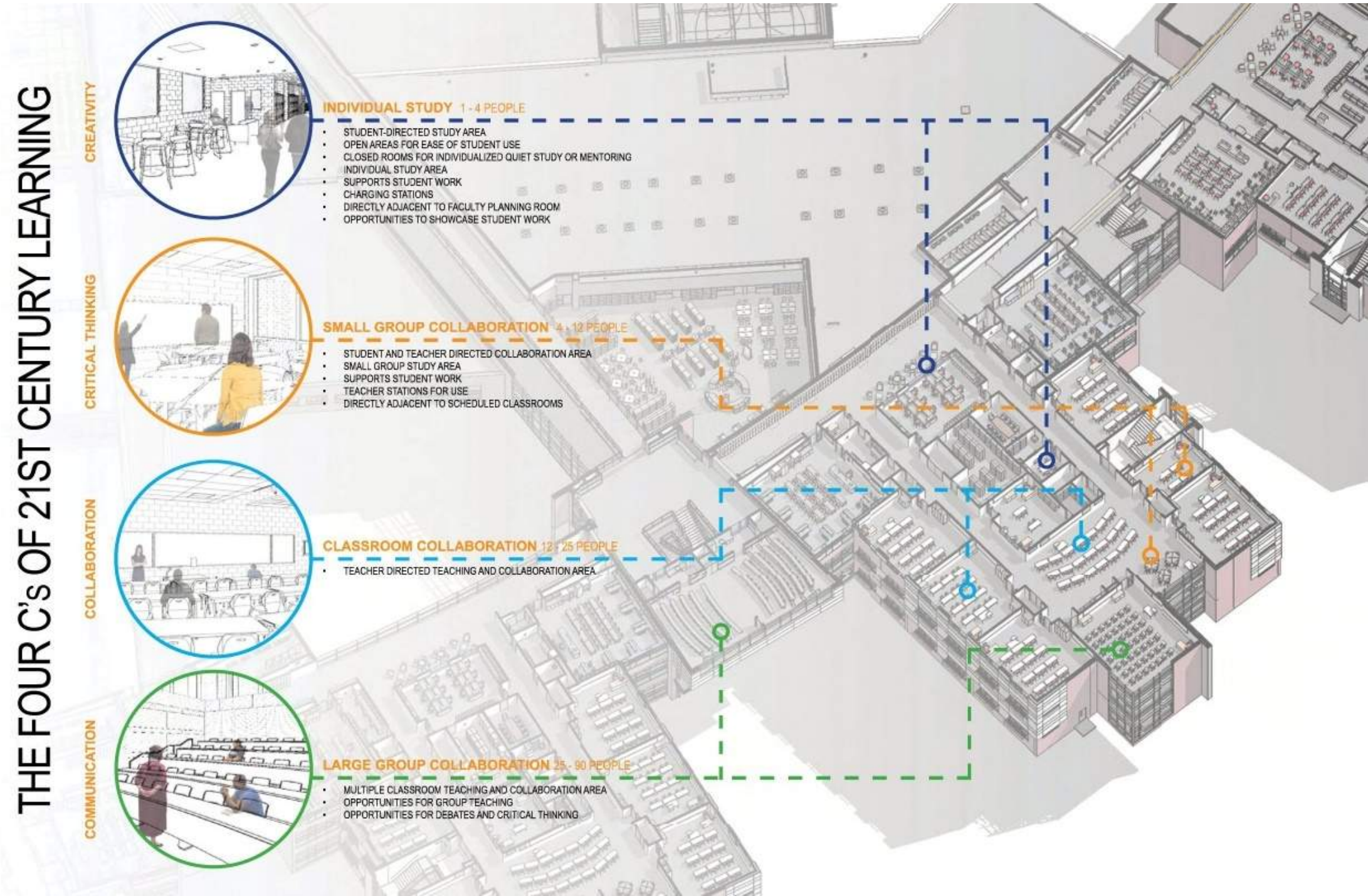


DOCUMENT EVOLUTION



Final layout of shared student zones within each classroom wing. Square footage of final spaces were reduced while maintaining open areas between classrooms for interaction, variations in student groupings & visual connection to classrooms.

DOCUMENT EVOLUTION





COMMUNITY, FACULTY, PARENT, STUDENT PARTICIPATION



OFFICE OF CAPITAL PROGRAMS
THE SCHOOL DISTRICT OF PHILADELPHIA

Solomon Solis-Cohen Elementary School COMMUNITY MEETING



Join us for a project kickoff to introduce and
present the design of the new school!

Monday, March 26, 2018 at 5:30 p.m.

7001 Horrocks St.
Philadelphia, PA 19149



مكتب برامج الأساسيات منطقة فيلادلفيا التعليمية

مدرسة سولومون سوليس كوهين الابتدائية اجتماع المجتمع
الاثنين 26 مارس 2018
الساعة 5:30 مساء

جدول الأعمال

ترحيب.....المديرة ميشيلينا سيرباني Michelina Serianni
غرض الاجتماع.....المديرة ميشيلينا سيرباني Michelina Serianni
مقدمة.....مكتب برامج الأساسيات

• نظرة عامة للمشروع
• مقدمة لممثل منظمة المجتمع المسجلة (RCO) Registered Community Organization Representative
• مقدمة من مدير البناء - Reynolds Building Solutions
• مقدمة مهندس التصميم المعماري - Associates Architects & Crabtree, Rohrbaugh

عرض التصميم.....جيف استروب (Associates Architects & Crabtree, Rohrbaugh) Jeff Straub

• خطة الموقع وخطط الطوابق ، وجهات النظر في الشارع ومناظر الداخلية
البرنامج التعليمي
البيئة الخارجية
الاستدامة

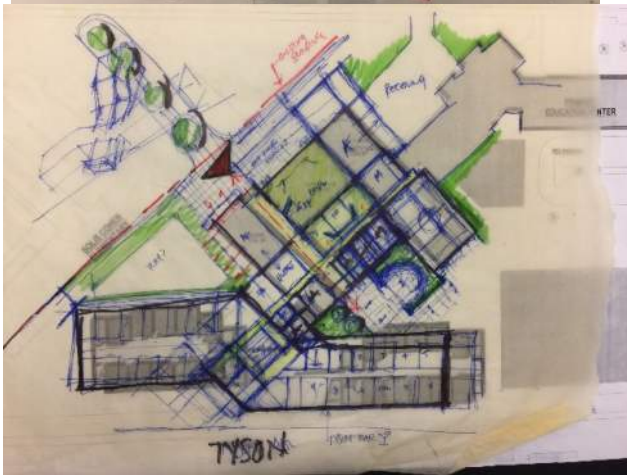
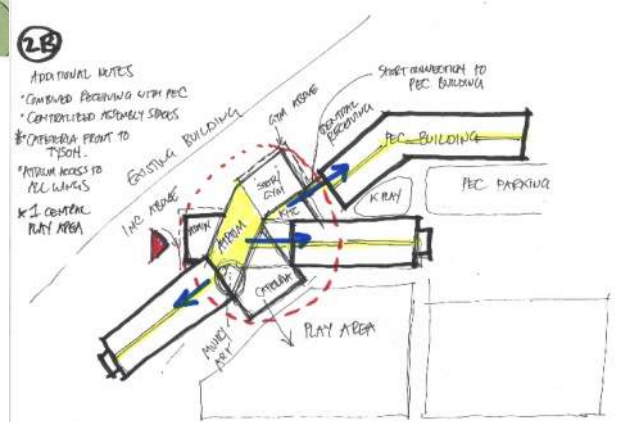
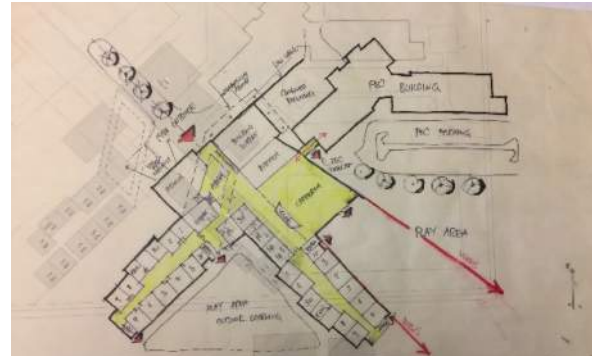
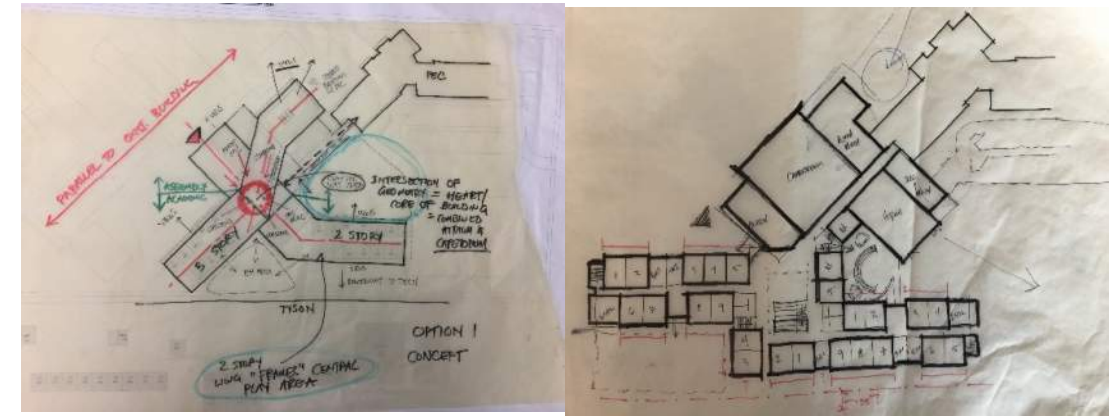
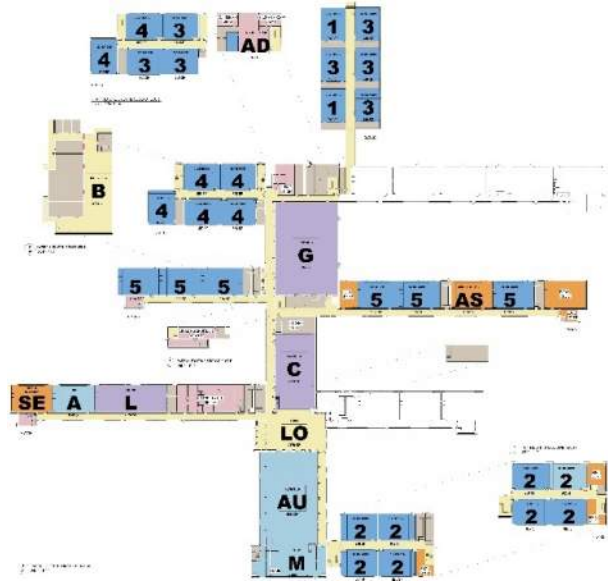
• الجدول الزمني:
التصميم
تصاريح تقسيم المناطق والبناء
البناء

• مراحل المشروع
• الإنزال و الالتقاط أثناء البناء

اسئلة واجوبة.....Associates Architects & Crabtree, Rohrbaugh
ومكتب برامج الأساسيات
خاتمة الاجتماع.....Associates Architects & Crabtree, Rohrbaugh
ومكتب برامج الأساسيات





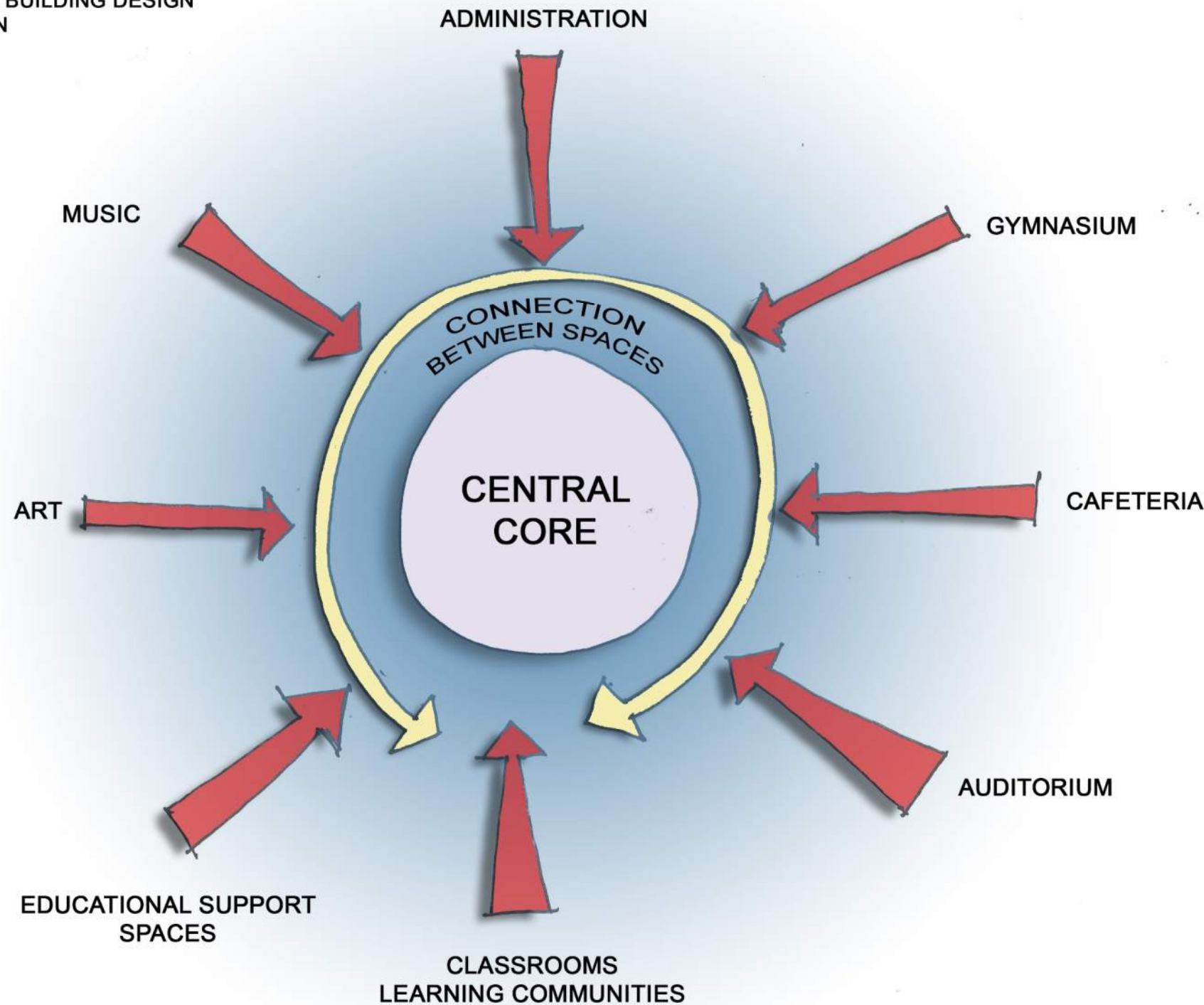


EVOLUTION OF BUILDING DESIGN WITH DESIGN TEAM, SDP AND S. SOLIS-COHEN ELEMENTARY



CORE CONCEPT

SET OF CRITERIA WHICH ALL BUILDING DESIGN
DECISIONS ARE BASED UPON



- * SPRINT
- * CONNECTION HOW?
- * FINDING

537

MAIN ENTRANCE - Center of circle?

views

CENTRAL CORE

LANDMARK.

HEART OF SCHOOL

FOCAL POINT

→ ORGANIZING ELEMENT

GATHERING SPACE

TRANSPARENCY

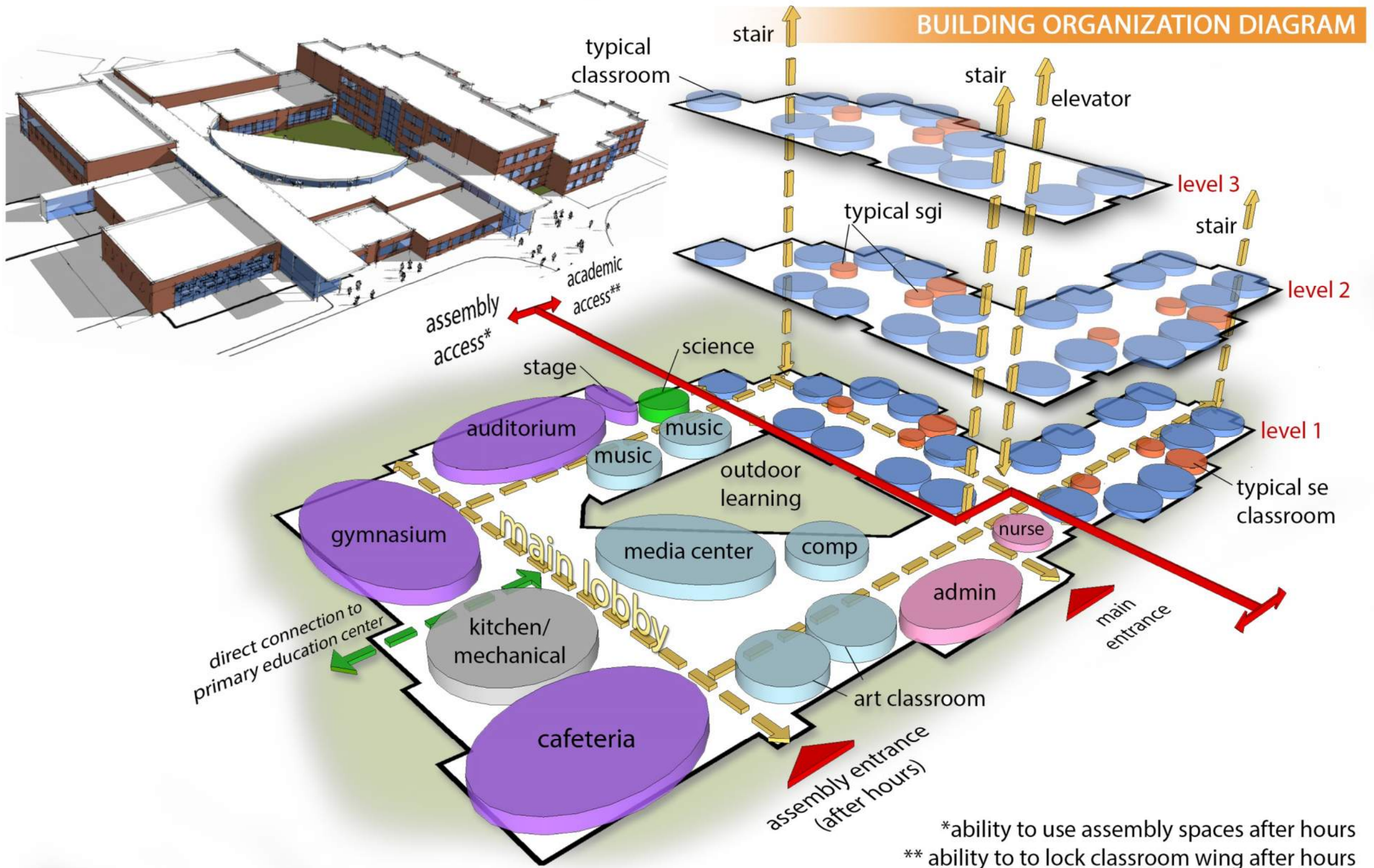
→ CANNABIS

7 DAY LIGHTING

→ WAYFINDING

7 COOPERATION

ASSEMBLY SPACE?
FEATURE SPACE?
OUTDOOR?



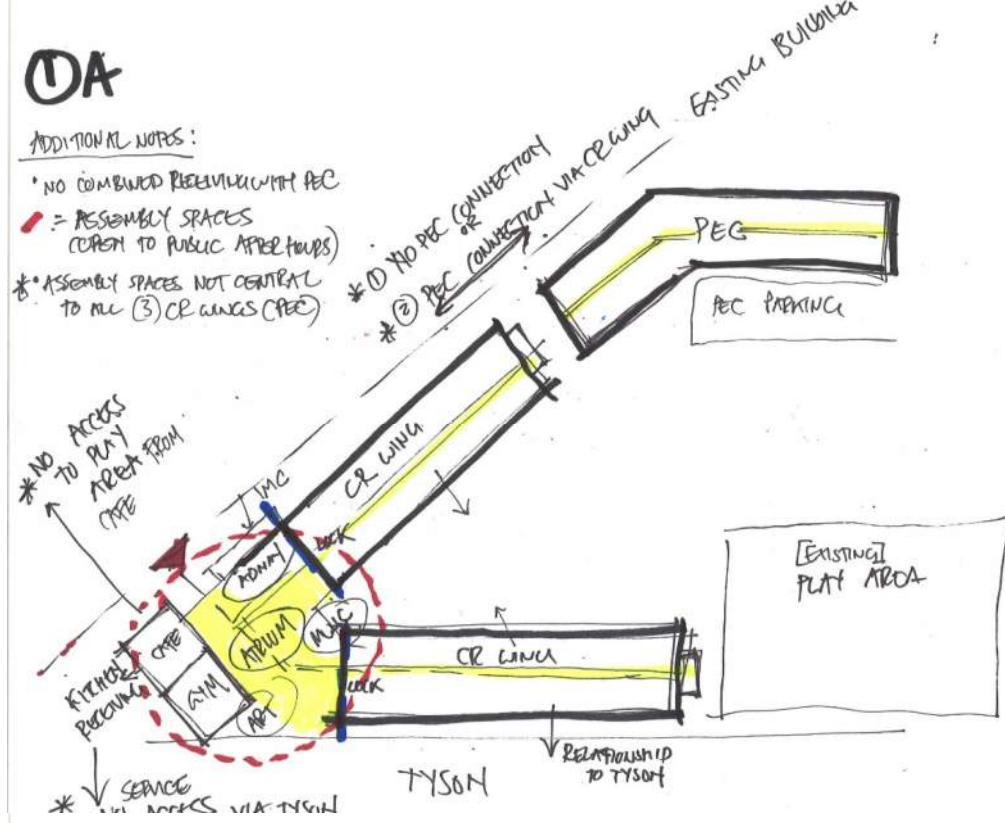
PROJECT PARADIGMS

- CAFETERIUM
 - DIRECT ACCESS TO PLAY AREA
 - DEDICATED SPACE (VS BEING IN ATRIUM)
- CANNOT BUILD OVER EXISTING PLAY AREA
 - SITE MITIGATION
 - NO VEHICULAR ENTRY
- ADJACENCY OF KITCHEN TO CAFETERIUM
- ADJACENCY OF RECEIVING TO KITCHEN
 - ∴ LOCATION OF KITCHEN, RECEIVING & CAFETERIUM HAS TO BE CLOSE TO PEC RECEIVING (CENTRAL RECEIVING)
- PHASING OF EXISTING BUILDING
- CONNECTION TO PEC
 - DAILY USE BY STUDENTS/TEACHERS
 - SHARED USE OF SPACES
 - SHORT DISTANCE ^{CONNECTION} (PER SPP)
- MINIMIZE BUILDING FOOTPRINT ON SITE TO MAXIMIZE GREEN SPACE/PARKING
- PEC ACTS AS CLASSROOM WING
- DIRECT ACCESS TO ALL CLASSROOM WINGS FROM ASSEMBLY SPACES, HUB (DON'T WALK THROUGH CLASSROOM WING ETC.) - (PEC CIRCULATION)
- NO VEHICULAR ACCESS FROM TYSON & BOSTLETON

1A

ADDITIONAL NOTES:

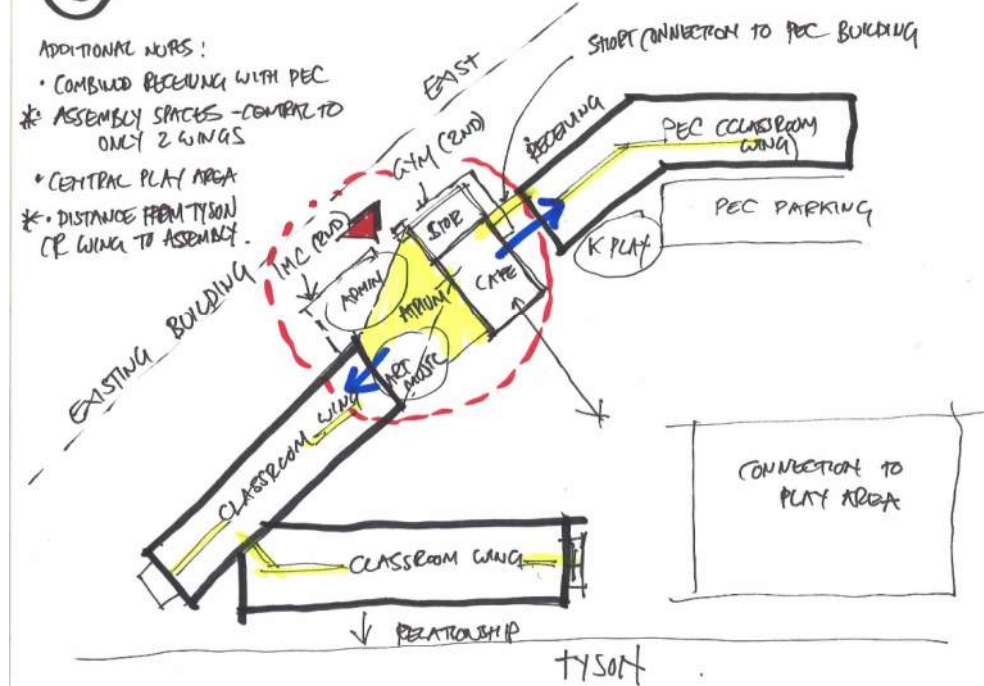
- * NO COMBINED RECEIVING WITH PEC
- * ASSEMBLY SPACES (OPEN TO PUBLIC AFTER HOURS)
- * ASSEMBLY SPACES NOT CENTRAL TO ALL (3) CR WINGS (CEE)
- * NO PEC CONNECTION OR CONNECTION VIA CR WING
- * NO PEC CONNECTION



1B

ADDITIONAL NOTES:

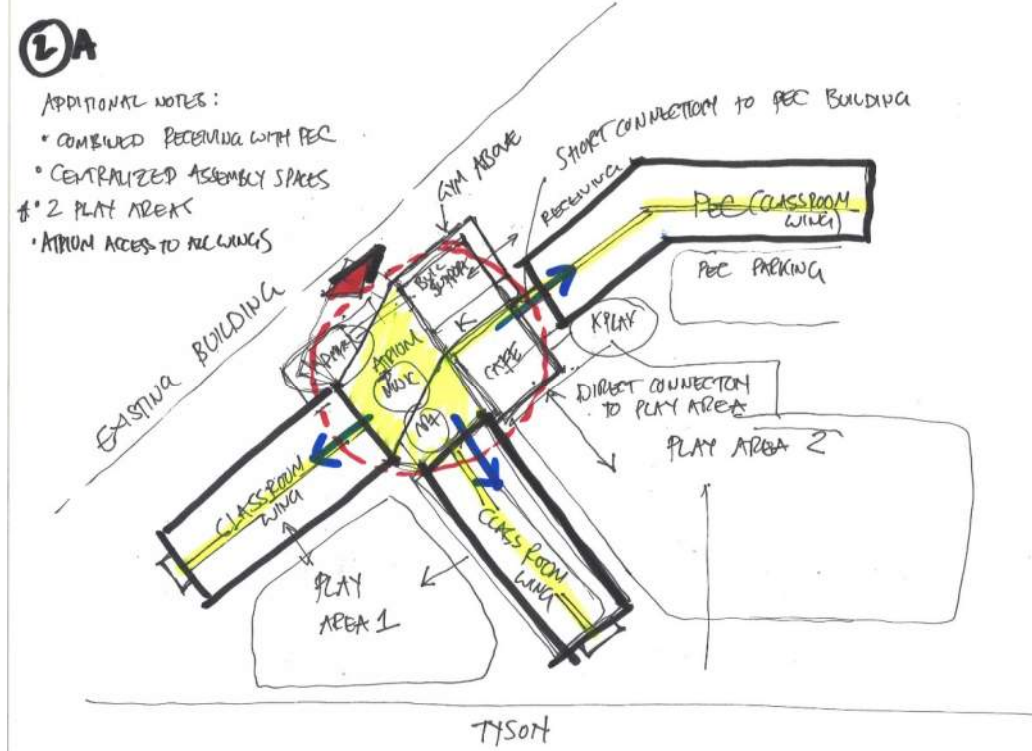
- * COMBINED RECEIVING WITH PEC
- * ASSEMBLY SPACES - CENTRAL TO ONLY 2 WINGS
- * CENTRAL PLAY AREA
- * DISTANCE FROM TYSON CR WING TO ASSEMBLY



2A

ADDITIONAL NOTES:

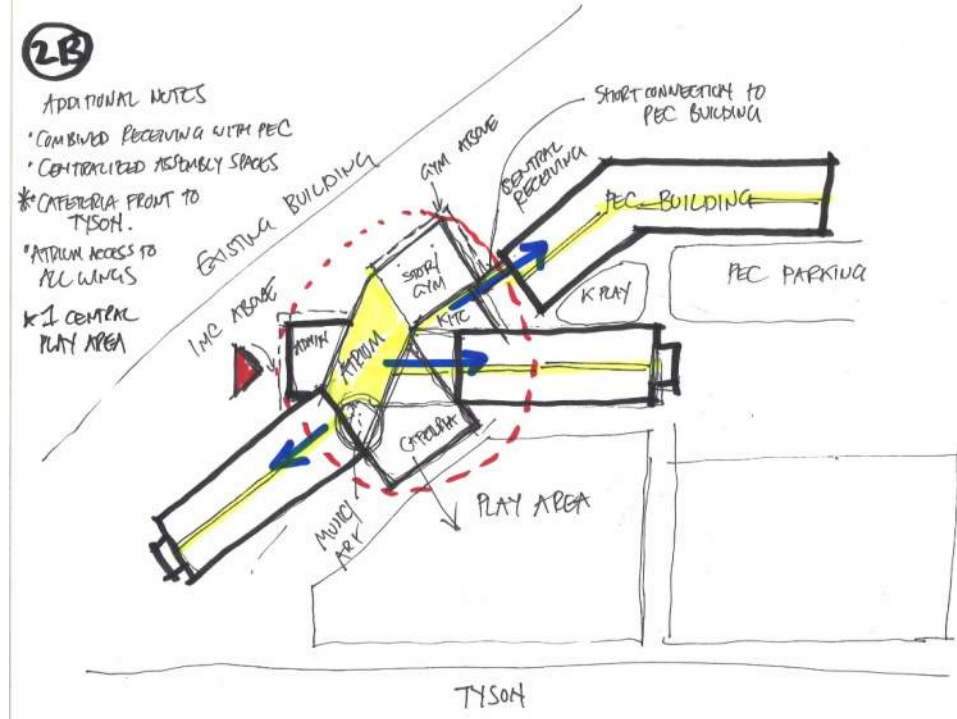
- * COMBINED RECEIVING WITH PEC
- * CENTRALIZED ASSEMBLY SPACES
- * 2 PLAY AREAS
- * ATRIUM ACCESS TO ALL WINGS



2B

ADDITIONAL NOTES:

- * COMBINED RECEIVING WITH PEC
- * CENTRALIZED ASSEMBLY SPACES
- * CATERING FRONT TO TYSON
- * ATRIUM ACCESS TO ALL WINGS
- * 1 CENTRAL PLAY AREA





RAUGH & ASSOCIATES - ARCHITECTS
www.roughandassociates.com

BUILDING CORE

**MAIN ENTRANCE
CAFETERIA
STAGE
GYMNASIUM
ADMINISTRATION
STUDENT SERVICES
LEARNING STAIR
SCIENCE
MUSIC**

**BUILDING
CORE**

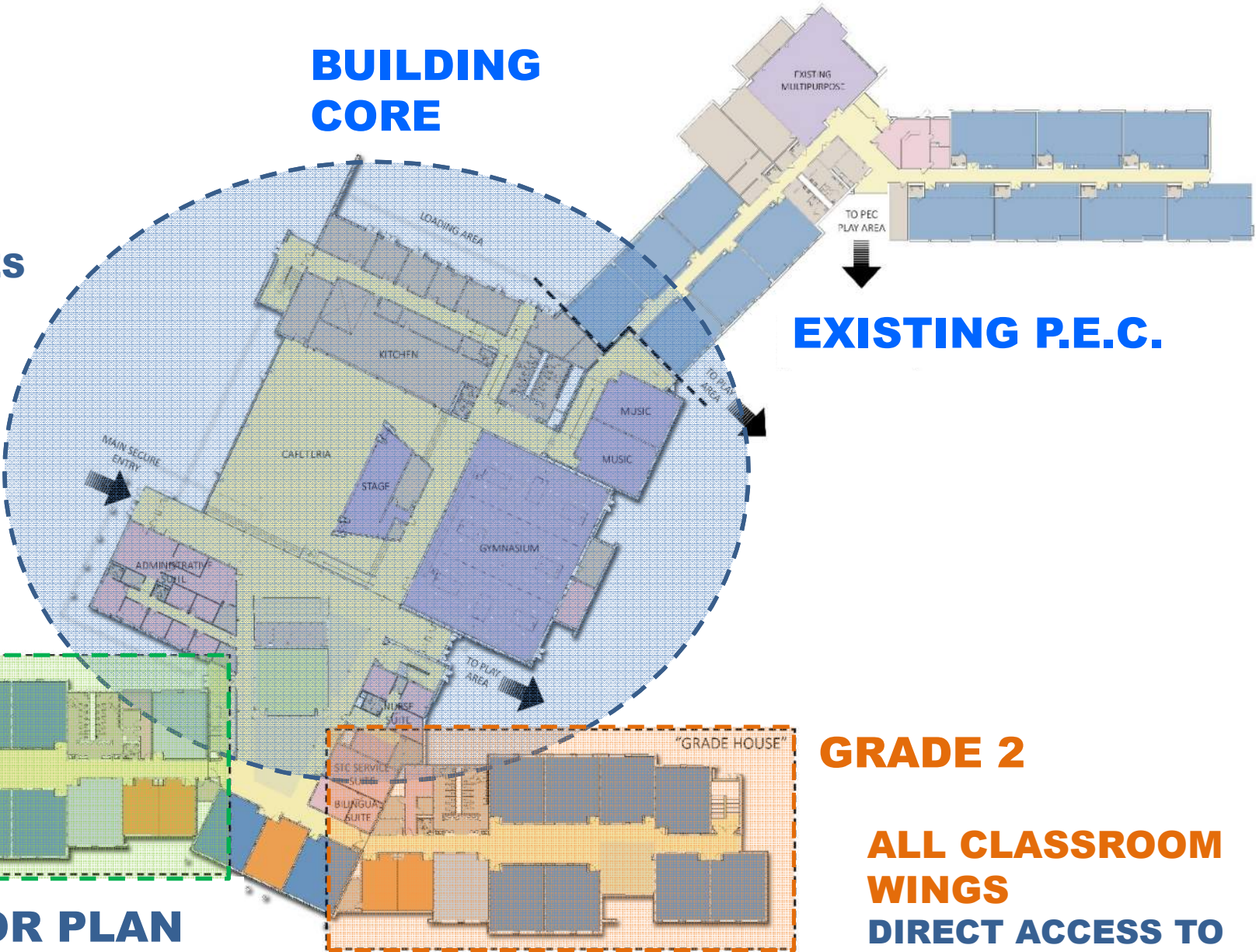
EXISTING P.E.C.

GRADE 1

GRADE 2

**ALL CLASSROOM
WINGS
DIRECT ACCESS TO
BUILDING CORE**

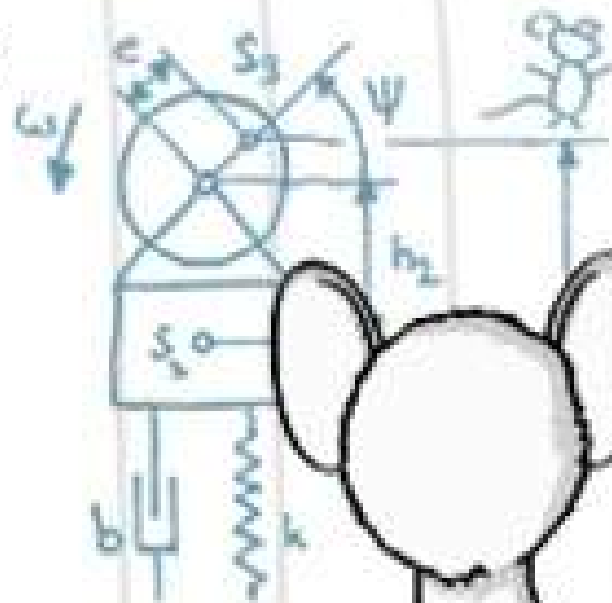
FIRST FLOOR PLAN





PROJECT SCHEDULE

Plan to Take Over the World:



$$f_{0,3} \geq 0$$

$$s(f, D, V) = \|D\| = P_1 + P_2 + P_3$$

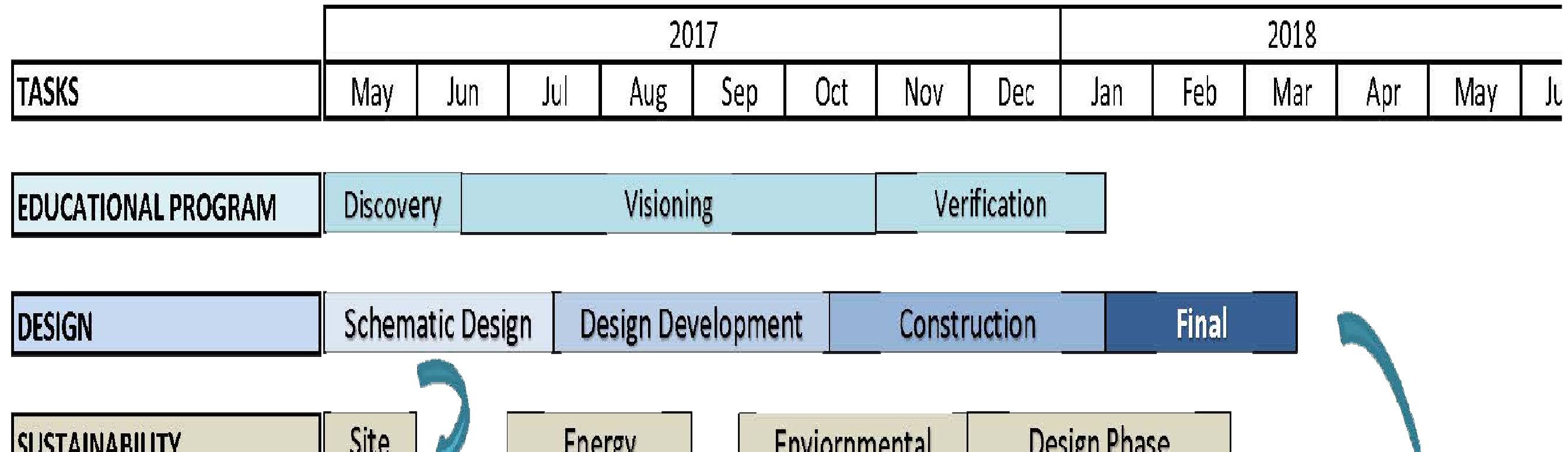


R_y m_3

M_c

DESIGN AND COMMUNITY ENGAGEMENT

DESIGN AND COMMUNITY ENGAGEMENT

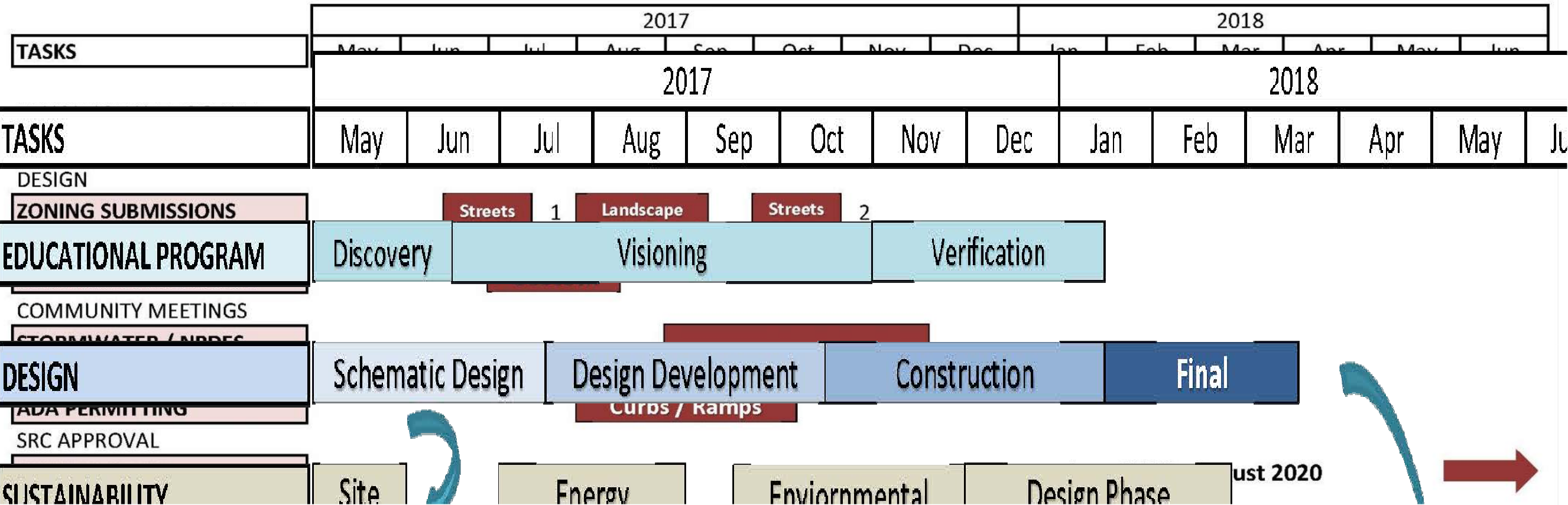


Solomon Solis Cohen Elementary School

Solomon Solis Cohen Elementary School

DESIGN AND COMMUNITY ENGAGEMENT

REGULATORY REVIEWS & APPROVALS



 SEVERAL VEHICULAR ACCESS POINTS

 OUTDOOR PLAY AREA

 UNOCCUPIED CLASSROOMS WINGS

EXISTING CONDITIONS





SOLIS COHEN ELEMENTARY SCHOOL - SITE PHASING PLAN

JANUARY 2020 (REV. JANUARY 2020)

CONSTRUCTION AREA WITH FENCING OFF LIMITS TO THE PUBLIC

BUILDING CONSTRUCTION

BUILDING DEMOLITION - PHASE 1

OCCUPIED SCHOOL TO BE DEMOLISHED IN PHASE 2

CLASSROOM WINGS TO BE DEMOLISHED IN PHASE 2

CONSTRUCTION TRAILERS

EXISTING ROADWAY ON PROPERTY BOUNDARY

NEW 100' X 200' X 10' SCHOOL BUILDING FOOTPRINT

VEHICULAR ACCESS FOR OCCUPIED SCHOOL

PROPOSED RAMP ACCESS FOR NEW SCHOOL BUILDING

PRINCETON AVENUE
(70' WIDE R.O.W. LEGALLY OPEN)
(17'-6" CITY PLAN)

PRINCETON AVENUE
(70' WIDE R.O.W. LEGALLY OPEN)
(17'-6" CITY PLAN)

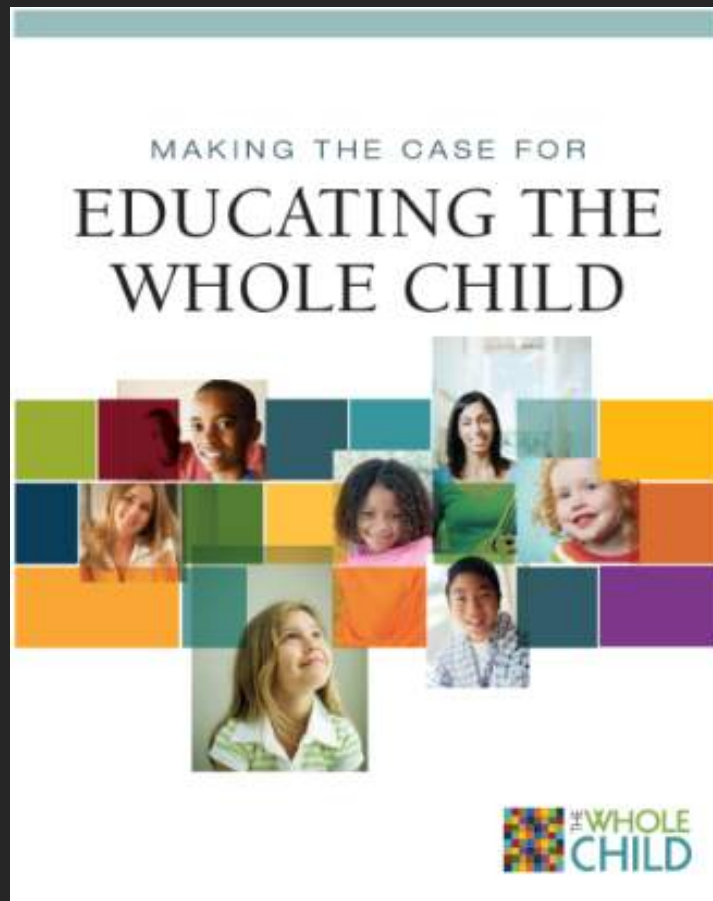
PHASING PLAN GENERAL NOTES:

1. REFER TO THE EXISTING BUILDING PHASING PLAN FOR DIRECTION OF CLASSROOM WINGS D.1, D.2, AND D.3 TO BE DEMOLISHED IN PHASE 1.
2. REFER TO THE EXISTING BUILDING PHASING PLAN FOR DIRECTION OF CLASSROOM WINGS D.1, D.2, AND D.3 TO BE DEMOLISHED IN PHASE 1.
3. REFER TO THE EXISTING BUILDING PHASING PLAN FOR DIRECTION OF CLASSROOM WINGS D.1, D.2, AND D.3 TO BE DEMOLISHED IN PHASE 1.
4. REFER TO THE EXISTING BUILDING PHASING PLAN FOR DIRECTION OF CLASSROOM WINGS D.1, D.2, AND D.3 TO BE DEMOLISHED IN PHASE 1.

The diagram illustrates the site phasing plan for Solis Cohen Elementary School. It shows the layout of the existing building, the new building footprint, and the construction area. The plan is divided into several phasing stages, labeled A through H. Stage A is the main entrance area. Stage B is the main entrance area. Stage C is the main entrance area. Stage D is the main entrance area. Stage E is the main entrance area. Stage F is the main entrance area. Stage G is the main entrance area. Stage H is the main entrance area. The plan also shows the location of construction trailers, existing roadways, and proposed ramp access. The plan is oriented with Princeton Avenue to the north and east.



SAFETY & SECURITY



“Feeling safe at school translates into higher academic achievement, increased student well being, and greater engagement. Children who don’t feel safe can’t concentrate on their studies, don’t connect with their classmates, or don’t go to school at all.”

Educating the whole
Child, ASCD 2012

EFFECTS OF BULLYING

- 3.2+ Million Students / Year
- 160K Students Skip School Daily
- 1 in 10 students drop out
- 71% of students report bullying





SCHOOL CLIMATE ISSUES

- Bullying, intimidation, and isolation
- Harassment and prejudice
- Social cliques
- Theft and graffiti
- Lack of connectedness
- Disrespect between teachers/staff and students
- Lack of student reporting of crime



SAFETY AND SECURITY

- Positive school climate and atmosphere
- Clear and high academic and disciplinary expectations of students
- Strong student attachment to the school
- High levels of both student participation and parent involvement
- Values and practices that make everyone feel included; appreciation of diversity

-  DIRECT CONNECTION TO PRIMARY EDUCATION CENTER (PRE-K & K)
-  SHARED SERVICE ENTRY - EXTEND EXISTING LOADING
-  SECURE OUTDOOR LEARNING SPACE & PLAY AREA
-  DESIGNATED BUS LOOP
-  ASSEMBLY SPACES CENTRALLY LOCATED FOR EASE OF USE
-  SECURE PERIMETER WITH ENTRY GATES
-  WITHIN SETBACK LIMITATIONS
-  ADDITIONAL PLAY AREAS & OUTDOOR LEARNING
-  DESIGNATED PARENT DROP OFF
-  CONTINUOUS PEDESTRIAN LOOP AROUND PROPERTY



SITE PLAN

ALL EDUCATIONAL SPACES SHOULD HAVE GLASS

Balance of Glass - Ability to shelter in place at the same time keeping hallways and breakout spaces viewable to reduce bullying and monitoring for staff

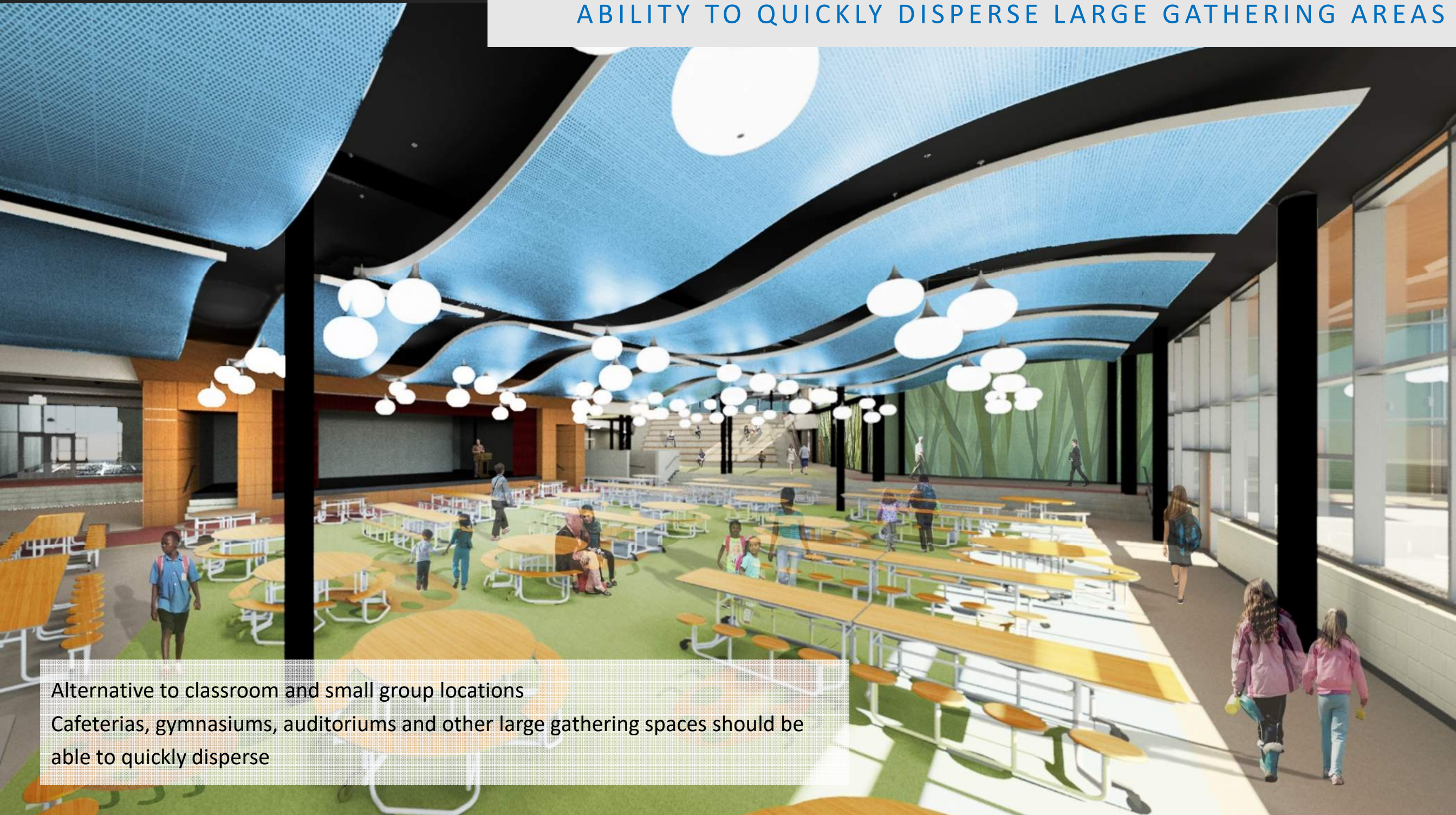
Involve law enforcement & first responders in discussion early

Alternative approach discussion

Example - ability to lock entire wing down and then encourage open 21st century educational spaces



ABILITY TO QUICKLY DISPERSE LARGE GATHERING AREAS



Alternative to classroom and small group locations
Cafeterias, gymnasiums, auditoriums and other large gathering spaces should be able to quickly disperse

WHAT IS A CLASSROOM TODAY

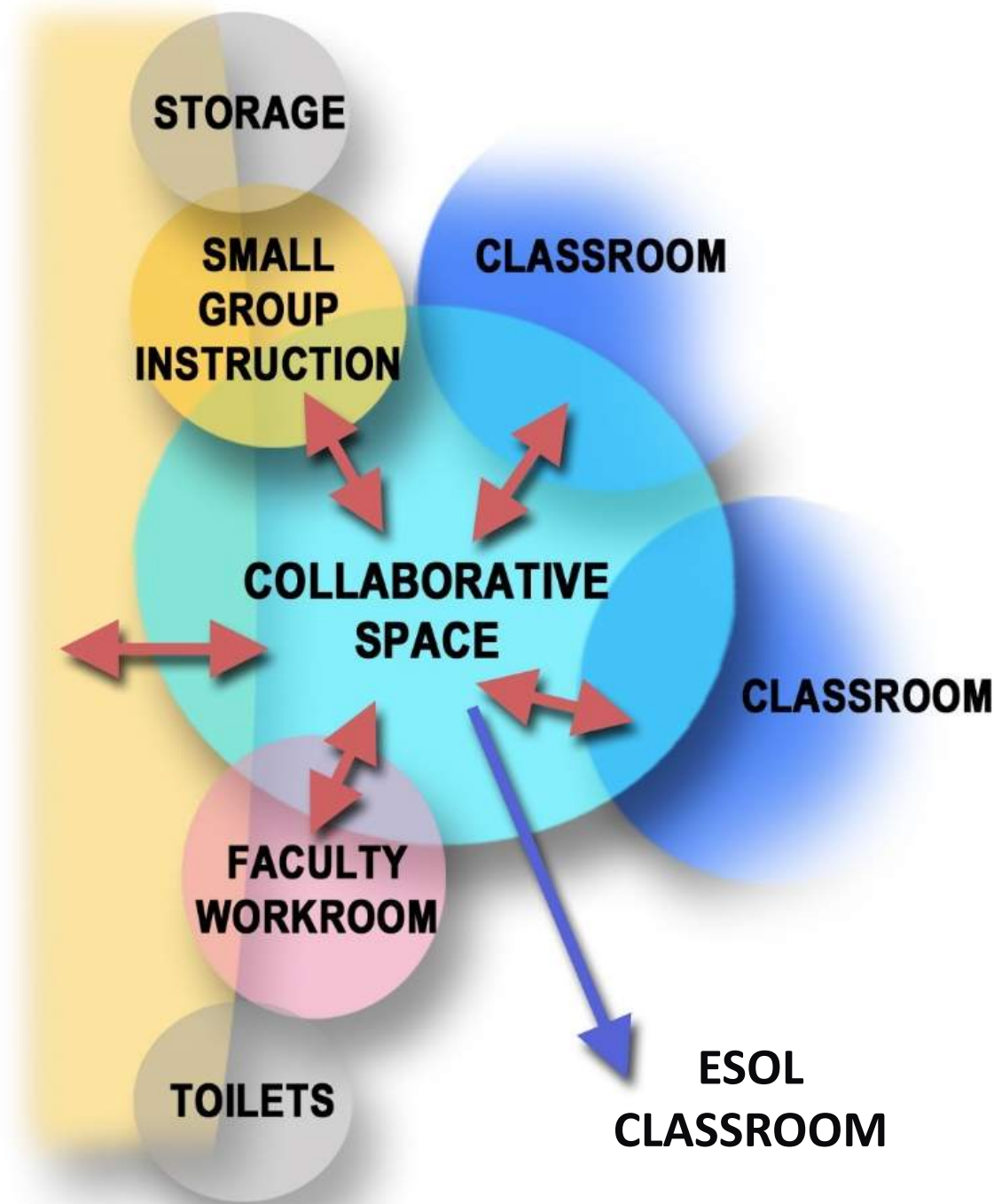
Deeper Learning in the 21st Century, 3 questions:

1. What skills do our students need to succeed?
2. What experiences are necessary to master those skills?
3. What types of spaces will support those experiences?





COMMUNITY MEETINGS



**BREAKDOWN OF CLASSROOM WING
SUPPORT SPACES**

ENVIRONMENT TO ENHANCE SKILLS USED BY TODAY'S LEARNERS

1st TIER

- **Collaboration and teamwork**
- **Creativity and imagination**
- **Critical thinking**
- **Problem solving**

2nd TIER

- **Flexibility and adaptability**
- **Global and cultural awareness**
- **Information literacy**
- **Leadership**

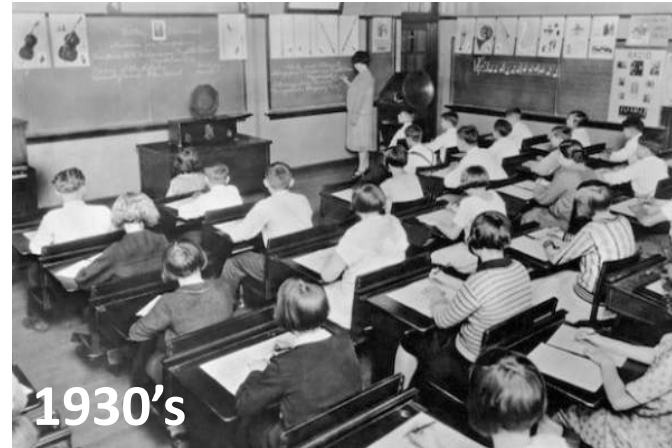
- SIMILAR CLASSROOMS CLOSE TOGETHER
- CIRCULATION AROUND GYM SHOULD BE MORE EFFICIENT
- DREARY HALLWAYS, TOO SMALL
- AUXILIARY GYM/INDOOR SPORTS IMPROVED
- INTERSECTIONS - CAFETERIA
- AUDITORIUM - ACOUSTICS/CAPACITY
- COLLABORATIVE SPACE
- MUSIC PRACTICE MODULES - TOO SMALL
- EASIER ACCESS TO AUDITORIUM FROM MUSIC
- CLASSROOMS
- COURTYARD USE EXTERIOR SPACES
- SPORTS FACILITIES



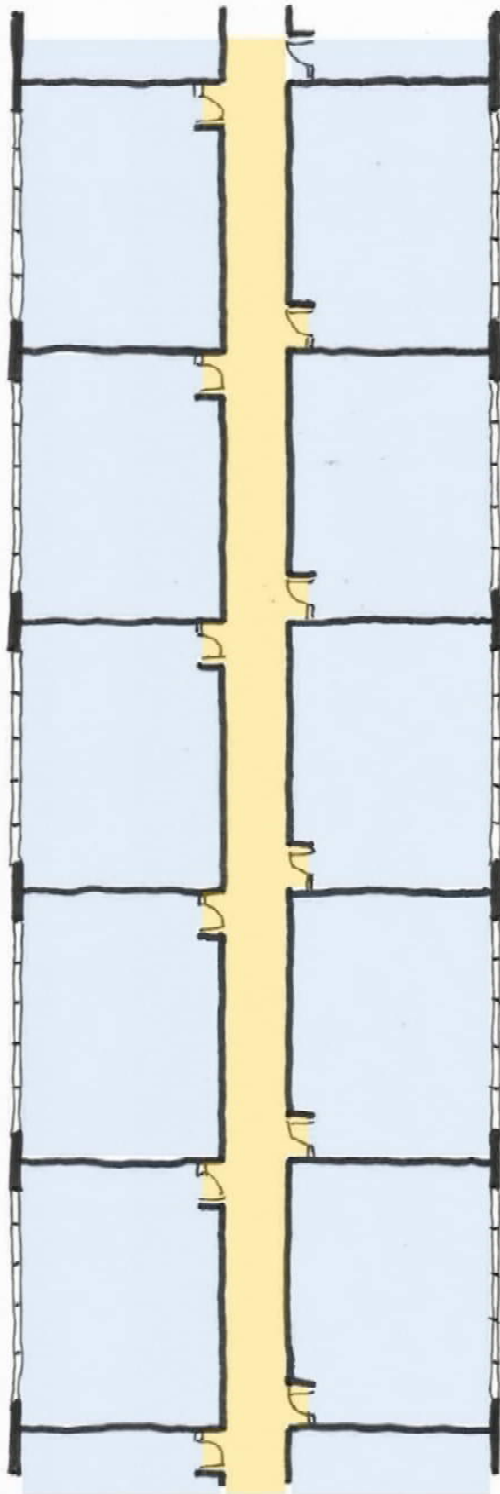


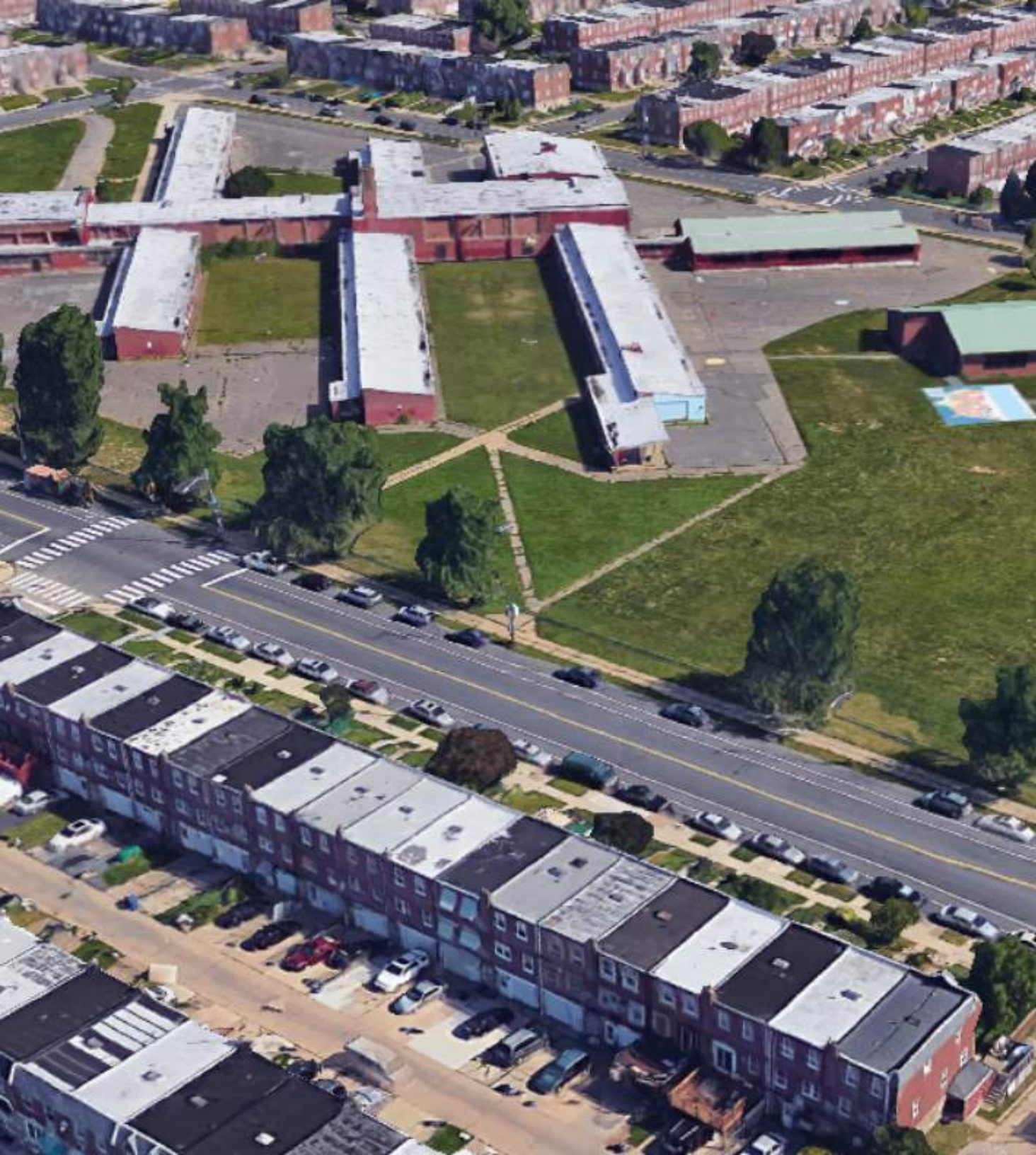
The industrial age factory model

- Information is rare
- Limited technology
- Teacher centric
- Learn in classroom
- Focus on 3 R's
- Passive learning
- Conformity expected
- Assertive assessment
- Curriculum fragmented



2020's ???????





21ST CENTURY LEARNING
CURRENT CONDITIONS



**Alexa, What will Schools
be in the future?**



Alexa, What will Schools
be in the future?

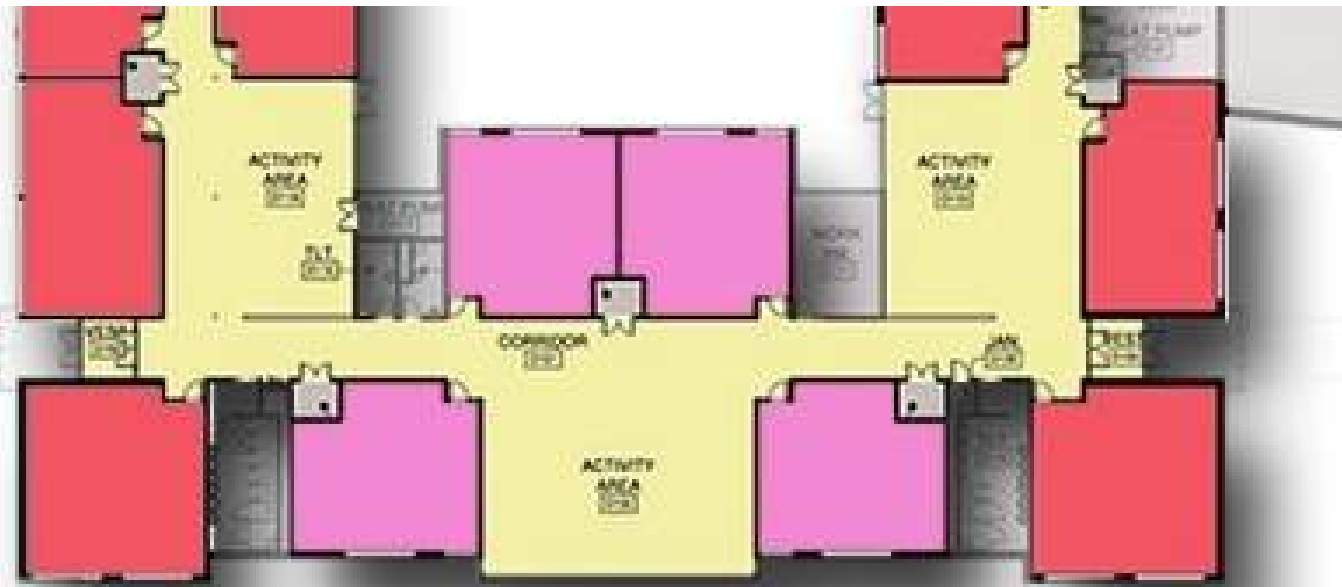
21ST CENTURY LEARNING



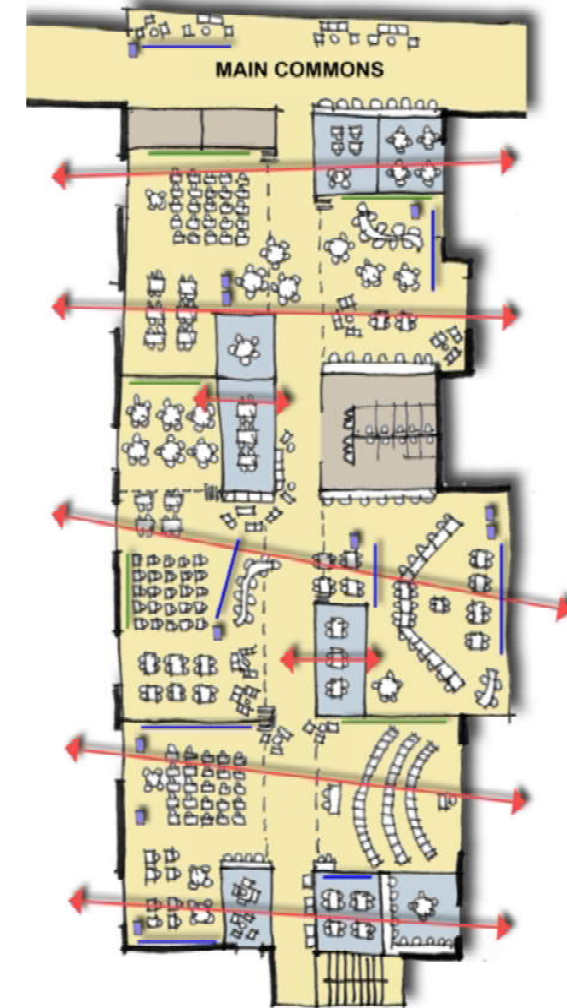
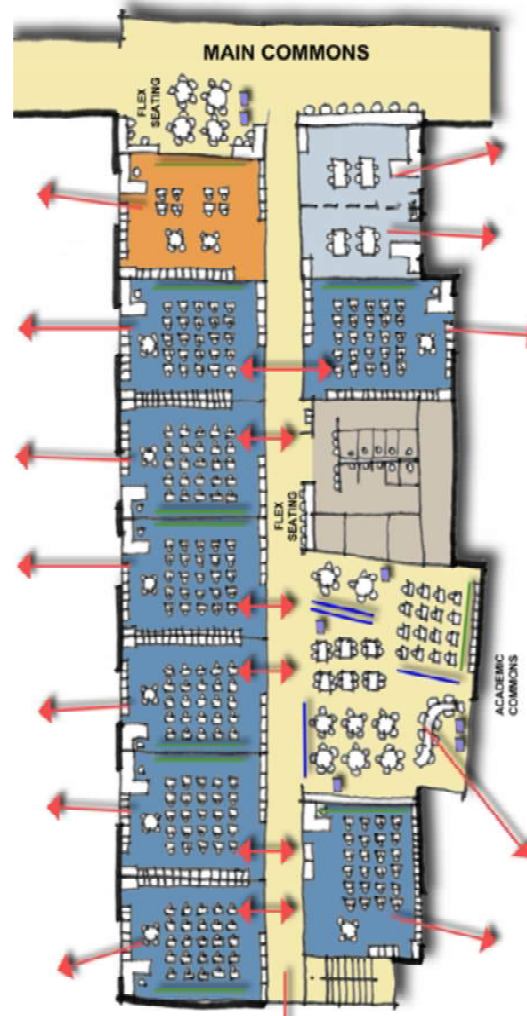
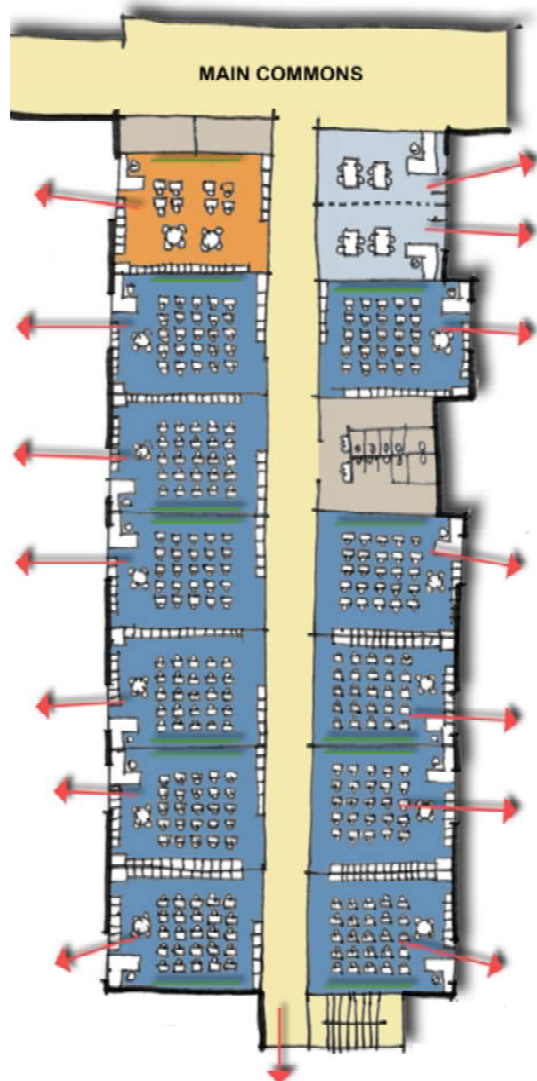
21ST CENTURY LEARNING

The innovation age model

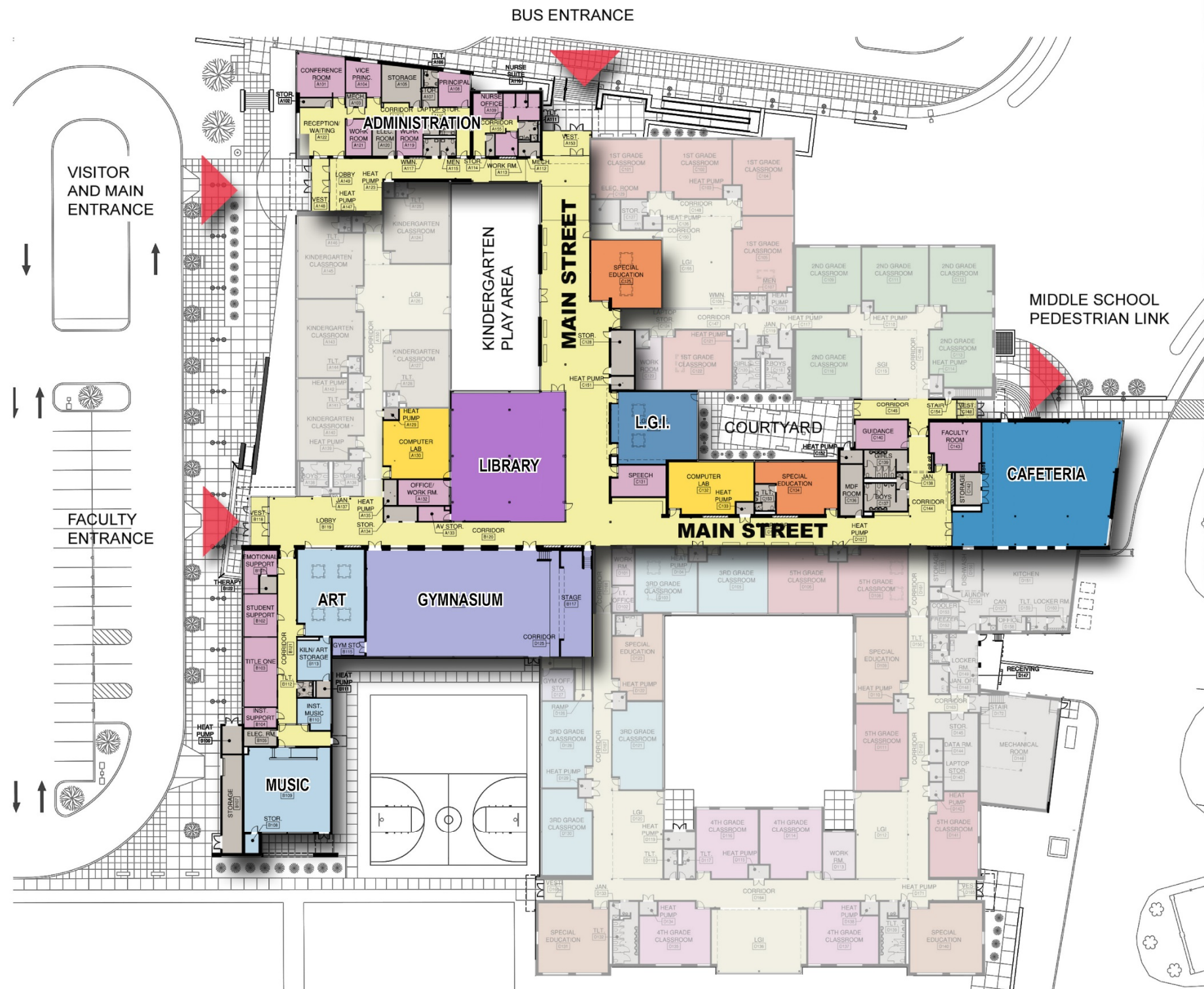
- Information is a commodity
- Ubiquitous technology
- Student centric
- Learn anywhere
- Develop 4 C's
- Active learning
- Individuality celebrated
- Demonstrative assessment
- Curriculum integrated



21ST CENTURY LEARNING
EARLY STUDY CLASSROOM WING STUDY
DEVIATIONS FROM ORIGINAL PROGRAM

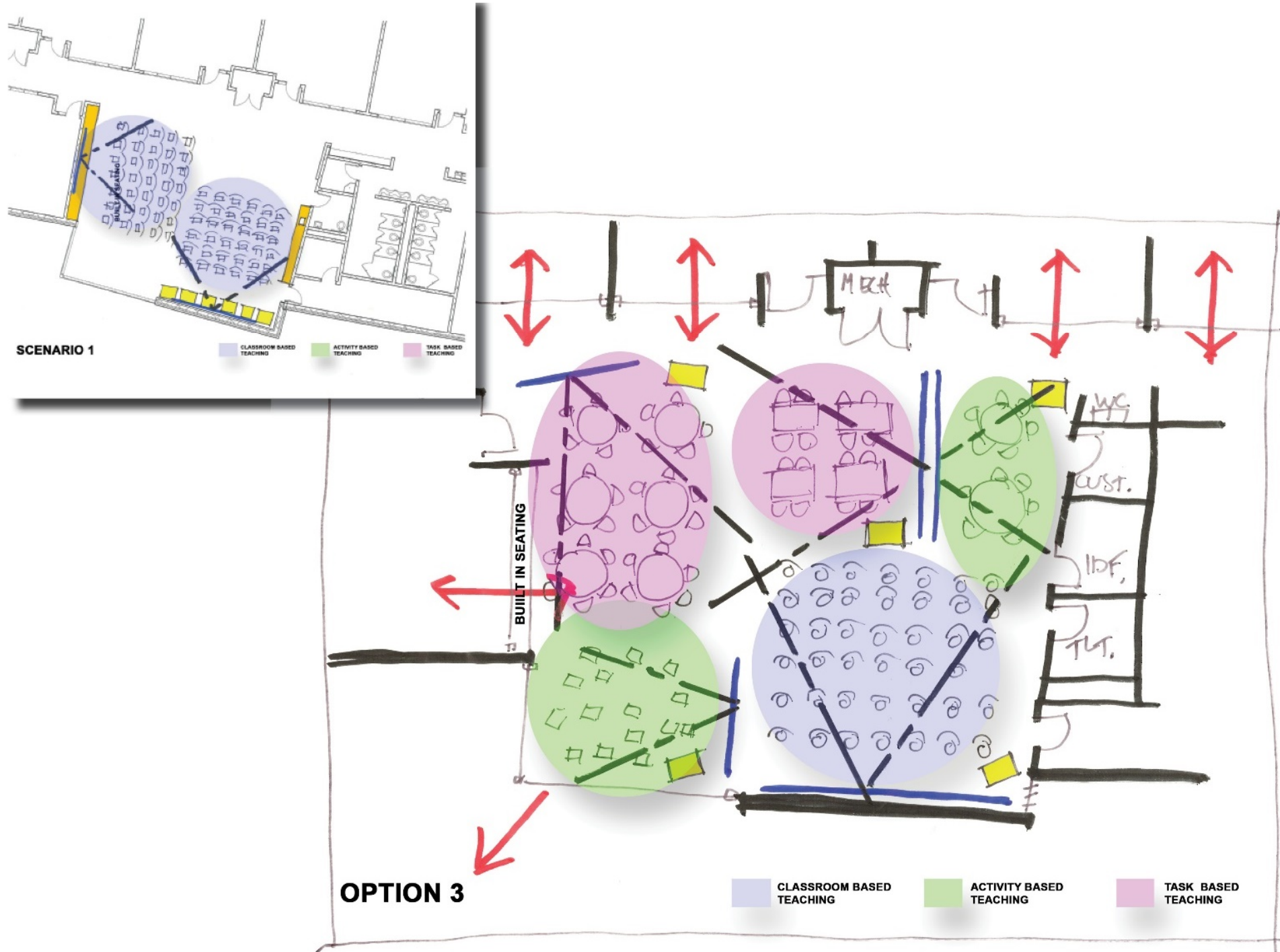


WHAT IS YOUR SCHOOL COMMUNITY COMFORTABLE ENGAGING?

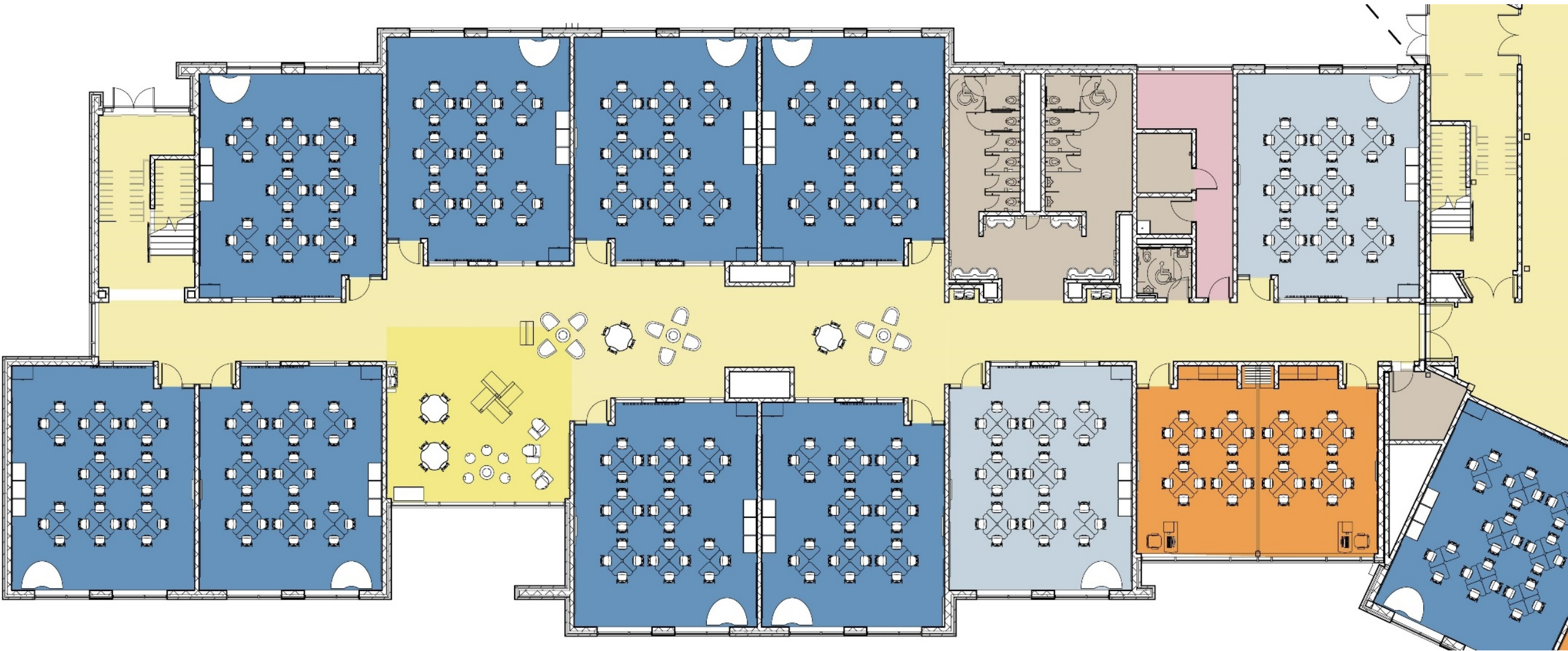


OVERALL FLOOR PLAN ORGANIZATION | MIDDLEBURG ELEMENTARY SCHOOL

COLLABORATIVE ENVIRONMENTS



- VIEWS/ VISUAL CONNECTION
- TEACHING WALL
- MOBILE CASEWORK
- FIXED CASEWORK
- COMBINATION OF OPTION 1 AND 2
- FULLY FLEXIBLE SPACE.
- FIXED TEACHING WALL AT EXTERIOR WALL.
- FULL DEPENDENCE ON MOBILE CASEWORK AND TEACHING WALLS TO ACCOMMODATE ALL GROUP SIZES.
- NO TEACHER'S WORK AREA.
- NO FIXED CASEWORK. LOW CASEWORK CAN BE ADDED IN LIEU OF FIXED SEATING SHOWN.
- EXPOSED DOORS TO UTILITARIAN SPACES.
- LOSS OF DIRECT VIEW OUT OF PARTIAL LENGTH OF EXTERIOR WALL. (HIGH GLASS ABOVE FIXED TEACHING WALL.)



5 GRADE HOUSES

Each Grade House Includes

- 9 classrooms (Allowing overall school to be brought down to 240-280 students)
- Open Small Group Breakout Instructional Area
- 1 English Speaking other Languages Classroom
- Dedicated Storage & Restrooms
- Ability to secure entire classroom wing in the event of an emergency

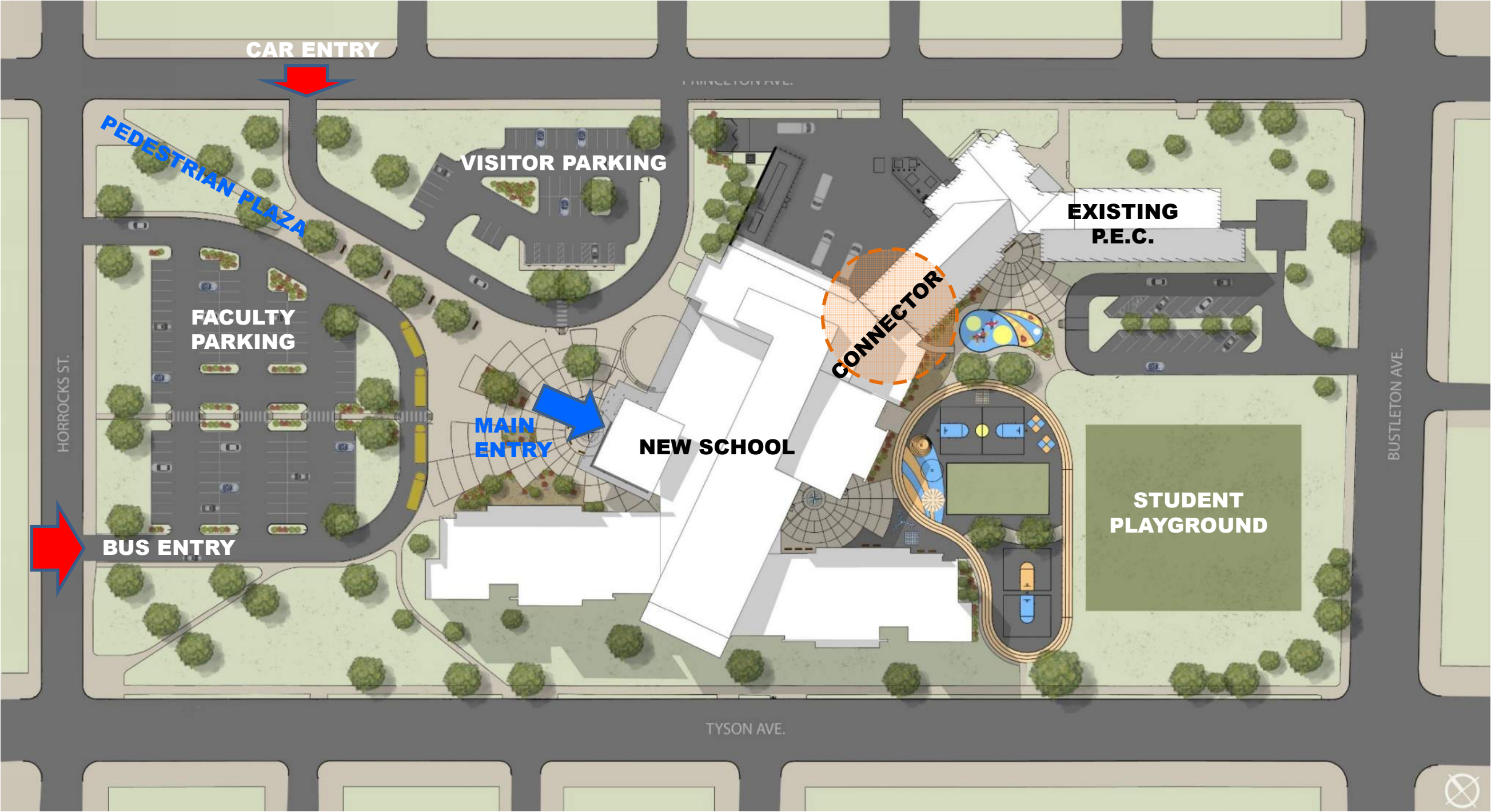


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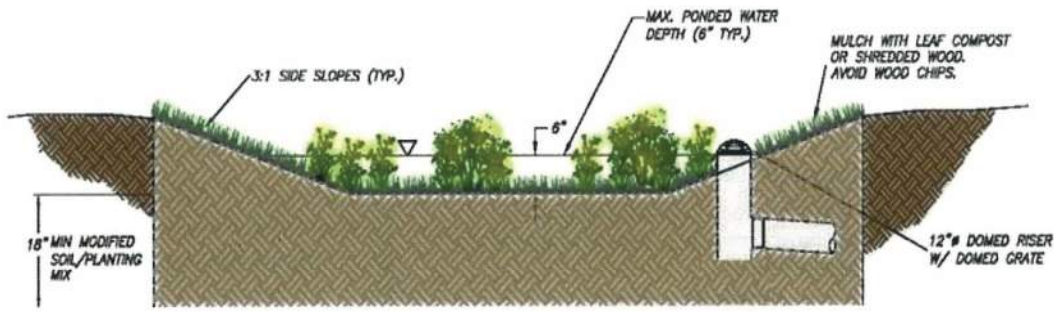
SITE DESIGN



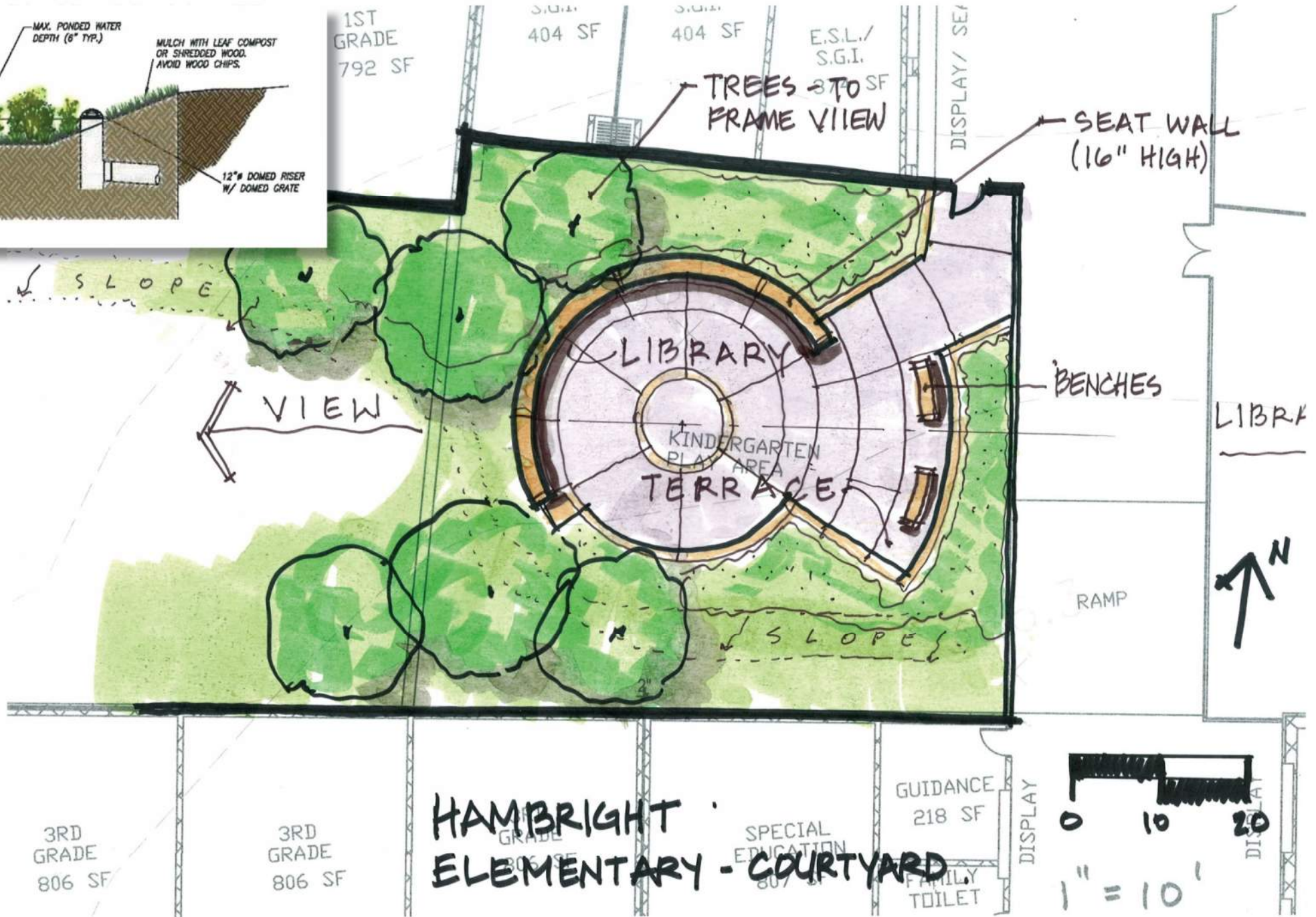
PROPOSED SITE PLAN



Images shared with Design Team of recent School District of Philadelphia Outdoor Projects.



OUTDOOR LEARNING SPACES ARE LOCATED BETWEEN EACH CLASSROOM WING TO PROVIDE INTIMATE EDUCATIONAL BREAKOUT SPACES FOR STUDENTS THROUGHOUT THE YEAR. THE OUTDOOR LEARNING SPACES ARE ACCESSED FROM THE MAIN STREET AND ARE DESIGNED TO BE AN EXTENSION OF THE INTERIOR LEARNING ENVIRONMENT WITH AMPLE GLASS SEPARATING THE INTERIOR AND EXTERIOR SPACES. THIS CONCEPT IS FURTHER REINFORCED BY THE EXTERIOR MATERIALS CONTINUING THROUGHOUT THE INTERIOR OF THE BUILDING. SHADE TREES FRAME VIEWS OUT TO NATURE AND CREATE A NATURAL OVERHEAD SHADE CANOPY. INDIGENOUS PLANTS WERE SPECIFICALLY PROPOSED AS AN EDUCATIONAL TOOL TO BE INTEGRATED WITHIN THE CURRICULUM.

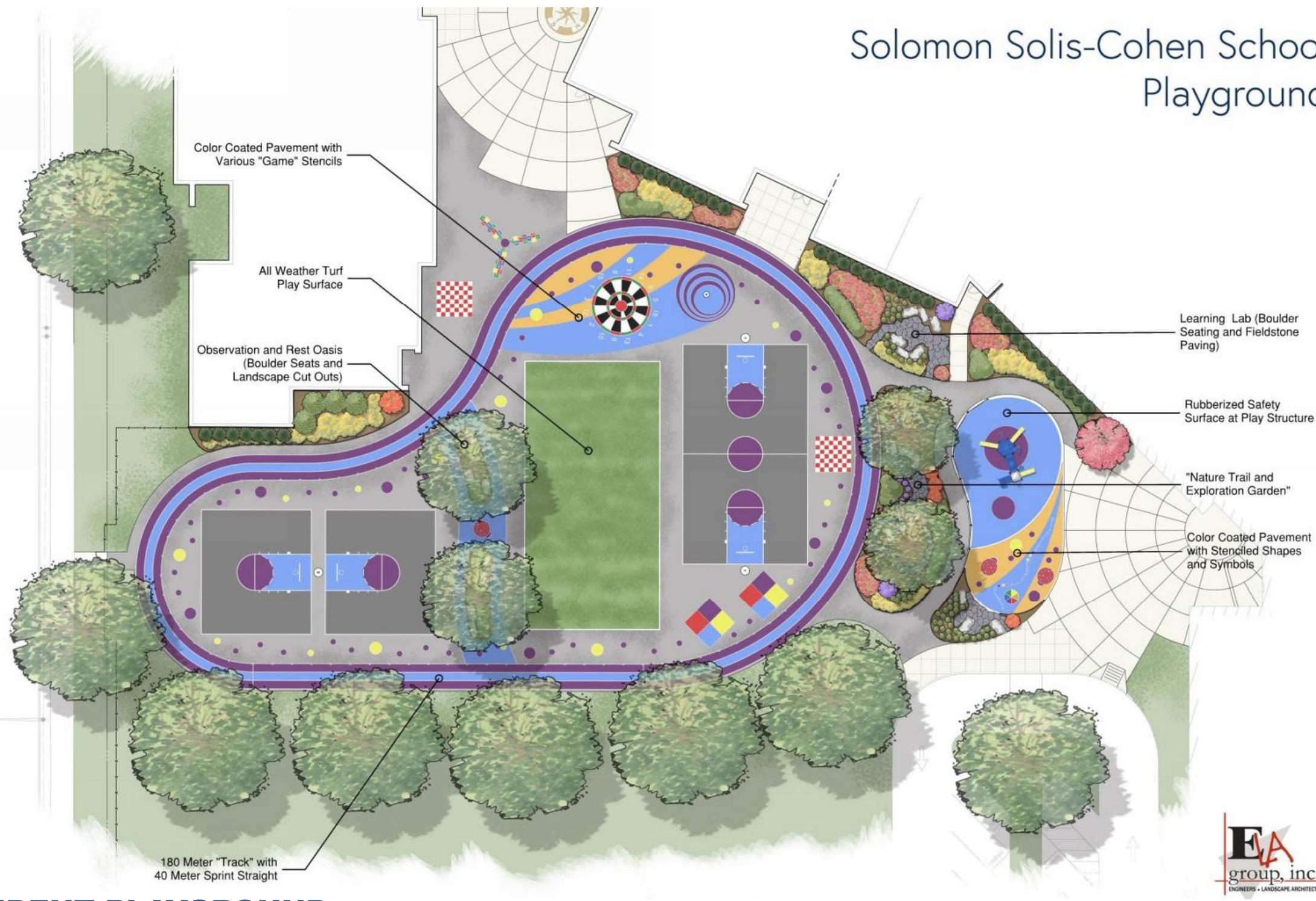


OUTDOOR LEARNING

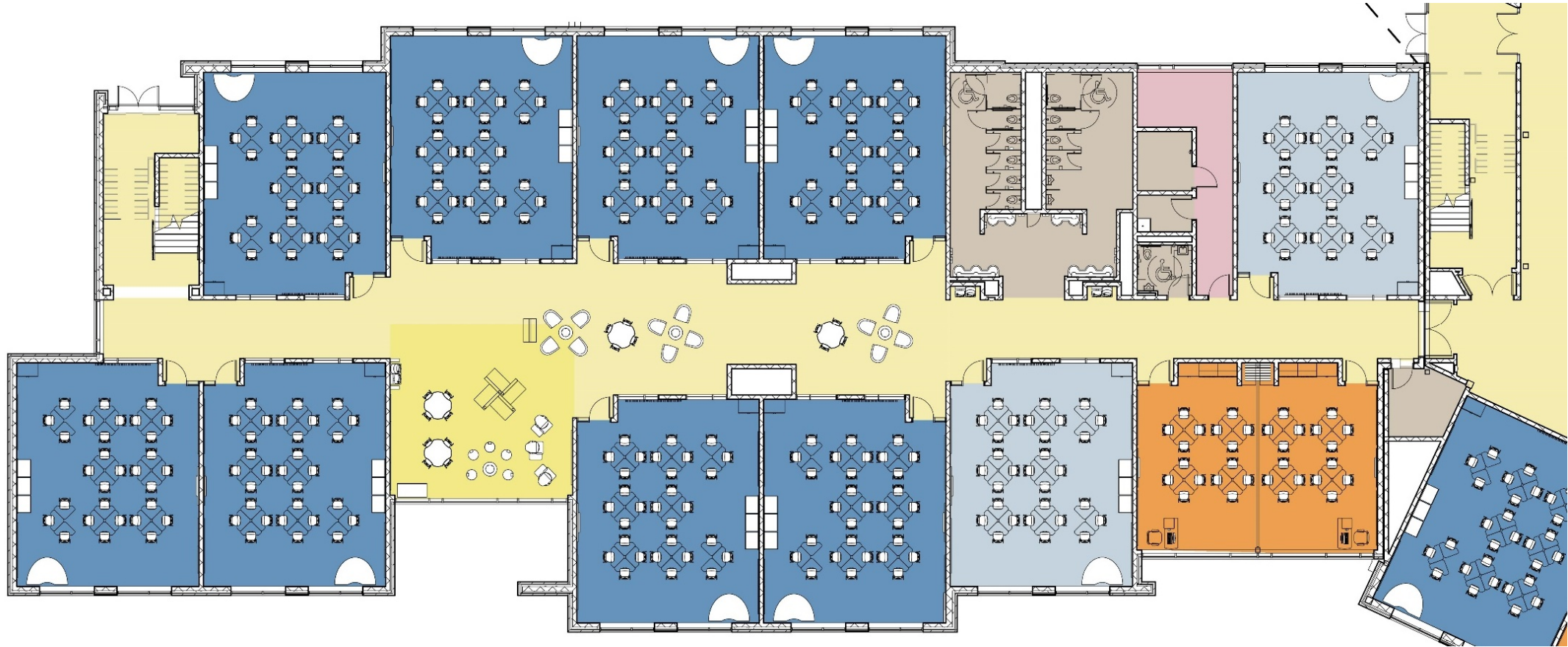


MIXTURE OF VARIED PLAY AND GATHERING AREAS FOR STUDENTS ABLE TO HOLD STUDENT BODY
Images shared with Design Team of recent School District of Philadelphia Outdoor Projects.

Solomon Solis-Cohen School Playground



STUDENT PLAYGROUND



5 GRADE HOUSES

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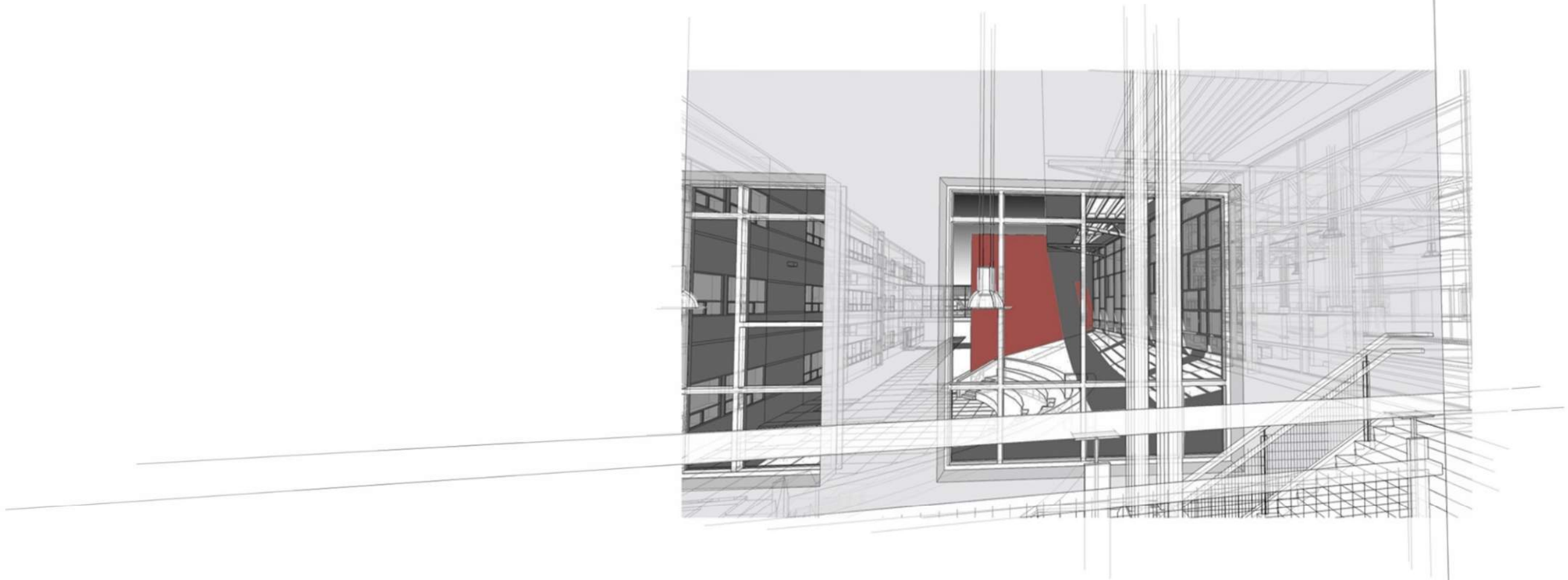


**Pinky... Tonight we take over the
World.... But First COFFEE!!!!**

SHARE OUR EXPERIENCES BEYOND THE EDUCATION DESIGN COMMUNITY

NSBA, PASBO, ASBO, AIA, USGBC
School Districts, Divisions, LEA's
Community Members
Legislators (Local, State, Federal)
Anyone Willing to Listen





We live for the most part in closed rooms. These form the environment from which our culture grows. Our culture is to a certain extent the product of our architecture. If we want our culture to rise to a higher level, we are obliged, for better or for worse, to change our architecture. And this only becomes possible if we take away the closed character from the rooms in which we live.

~Paul Scheerbart, 1914

**WE SPEND 87% OF OUR
DAY INDOORS.**

**US Environmental Protection Agency
National Human Activity Pattern Survey (NHAPS)**

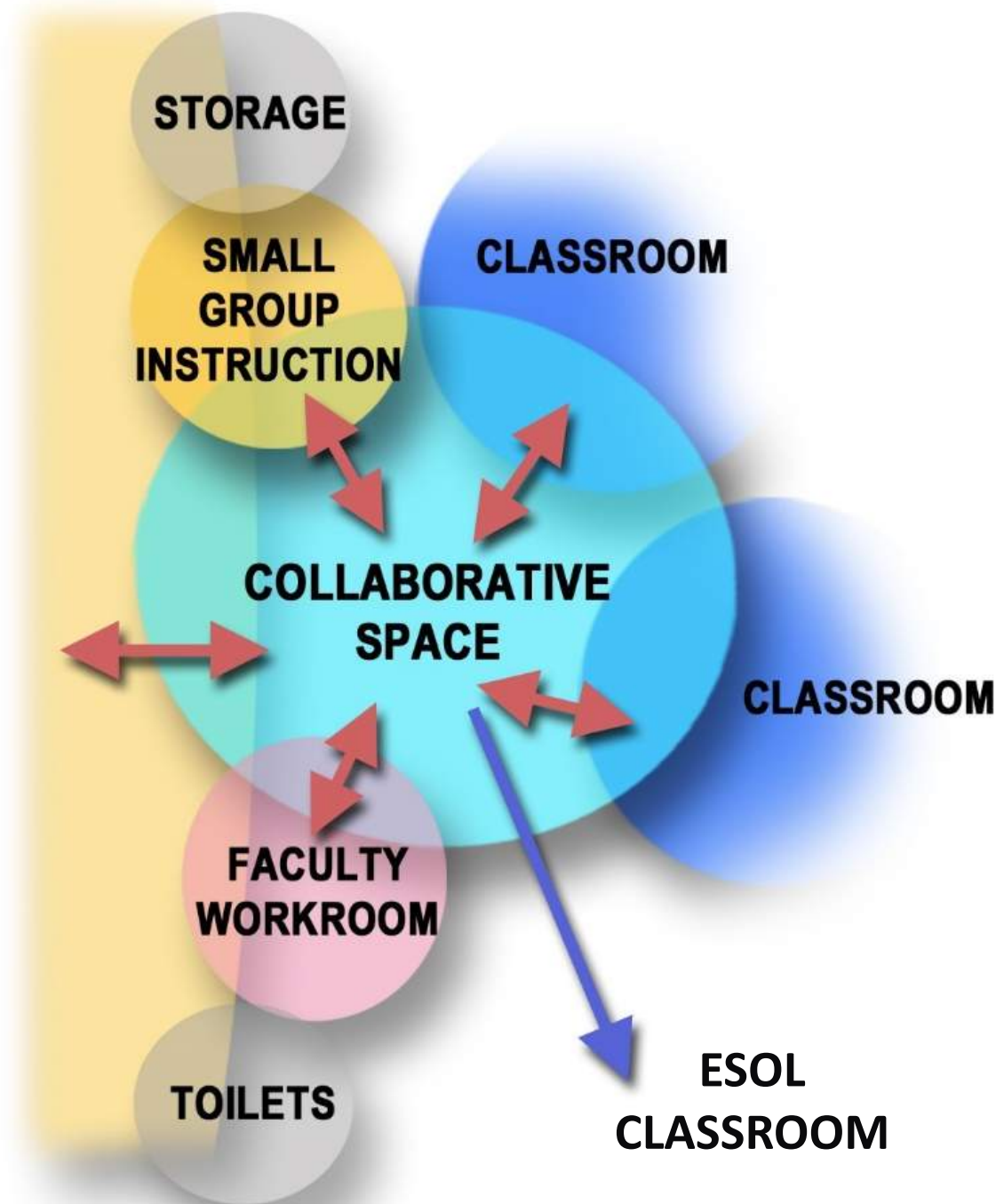
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- Global and cultural awareness
- Information literacy
- Leadership



**BREAKDOWN OF CLASSROOM WING
SUPPORT SPACES**

SUPER HEROES





Crabtree, Rohrbaugh &
Associates - Architects

THE SCHOOL DISTRICT OF PHILADELPHIA

