



Crabtree, Rohrbaugh & Associates

PRINCE GEORGE'S COUNTY
PUBLIC SCHOOLS

ARCHITECTURAL/ENGINEERING SERVICES

**WILLIAM WIRT
MIDDLE SCHOOL**

PROJECT TEAM

Crabtree, Rohrbaugh & Associates
Architectural, Interior Design, CA

John Beddia, AIA, LEED AP
Principal in Charge

Richard LeBlanc, AIA, LEED AP
Director of Design

Jeffrey Straub, AIA, REFP, LEED AP, CPD
Project Manager

Larry Levato, RA, LEED AP
Project Manager

Seth H. Wentz
Project Manager

John Pryor, RA
Project Architect

Robert Pillar, AIA, ALEP, LEED AP
Director of Educational Architecture

Nichole Seibert
Interior Design Project Manager

Danette Quave
Interior Design Project Manager

John Yarnall
Construction Administration

Lori Walls
Director of Client Relations

Global Engineering Solutions
MEP, FP & Net Zero

Essi Najafi
Principal

Vassilis Skardis, PE
Sr. Mechanical Engineer

Farshad Majidian, PE
Sr. Electrical Engineer

Mark Wilson, CPD, LEED AP
Sr. Plumbing Engineer

Laleh Zargarinejad, PE
Sr. Fire Protection Engineer

Carroll Engineering
Site/Civil Engineering

Craig Shannon, PE
Civil Engineer

Columbia Engineering, Inc.
Structural Engineering

Randall Haist, PE
Principal

MK Consulting Engineers
Landscape Architecture

David Locke, FASLA
Landscape Architect

Nyikos
Foodservice

Jay Garcia, FCSI
Principal

Educational Systems Planning
Technology

Bryan Jones
Multi-Media AV Designer

Forella Group
Cost Estimating

Peter Forella
Principal

ECS Unlimited
Environmental & Geotechnical

Gregory McIsaac, CPG
Environmental Department Manager

Metropolitan Acoustics
Acoustics & Audio/Visual

Felicia Doggett
Principal Consultant

**Prince George's
County Public
Schools**

AGENDA

Discuss Preliminary Schedule
Review Site Analysis
Review Educational Specifications

PROJECT SCHEDULE (DRAFT)

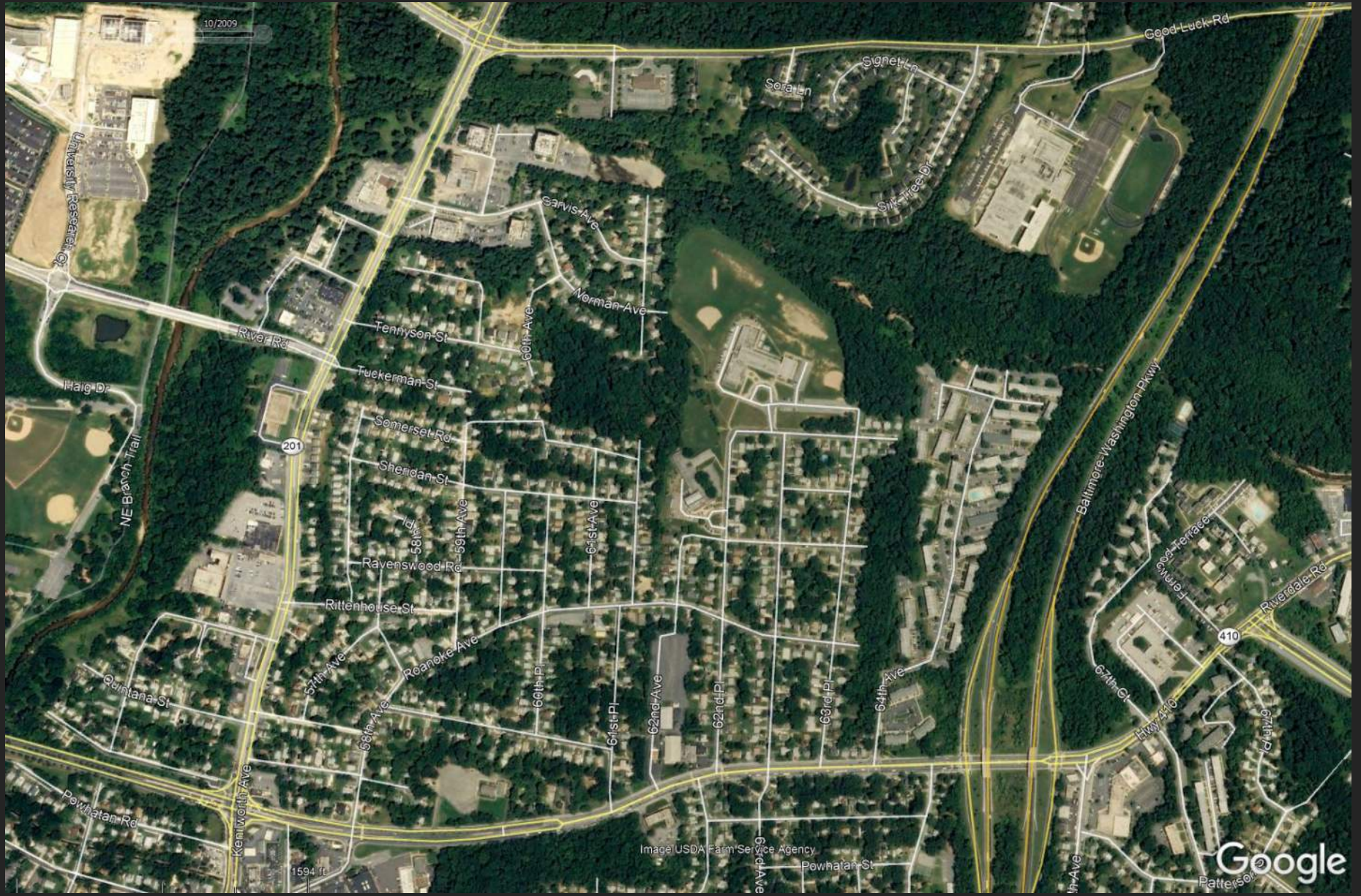
**PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS
PRELIMINARY MASTER PROJECT SCHEDULE**

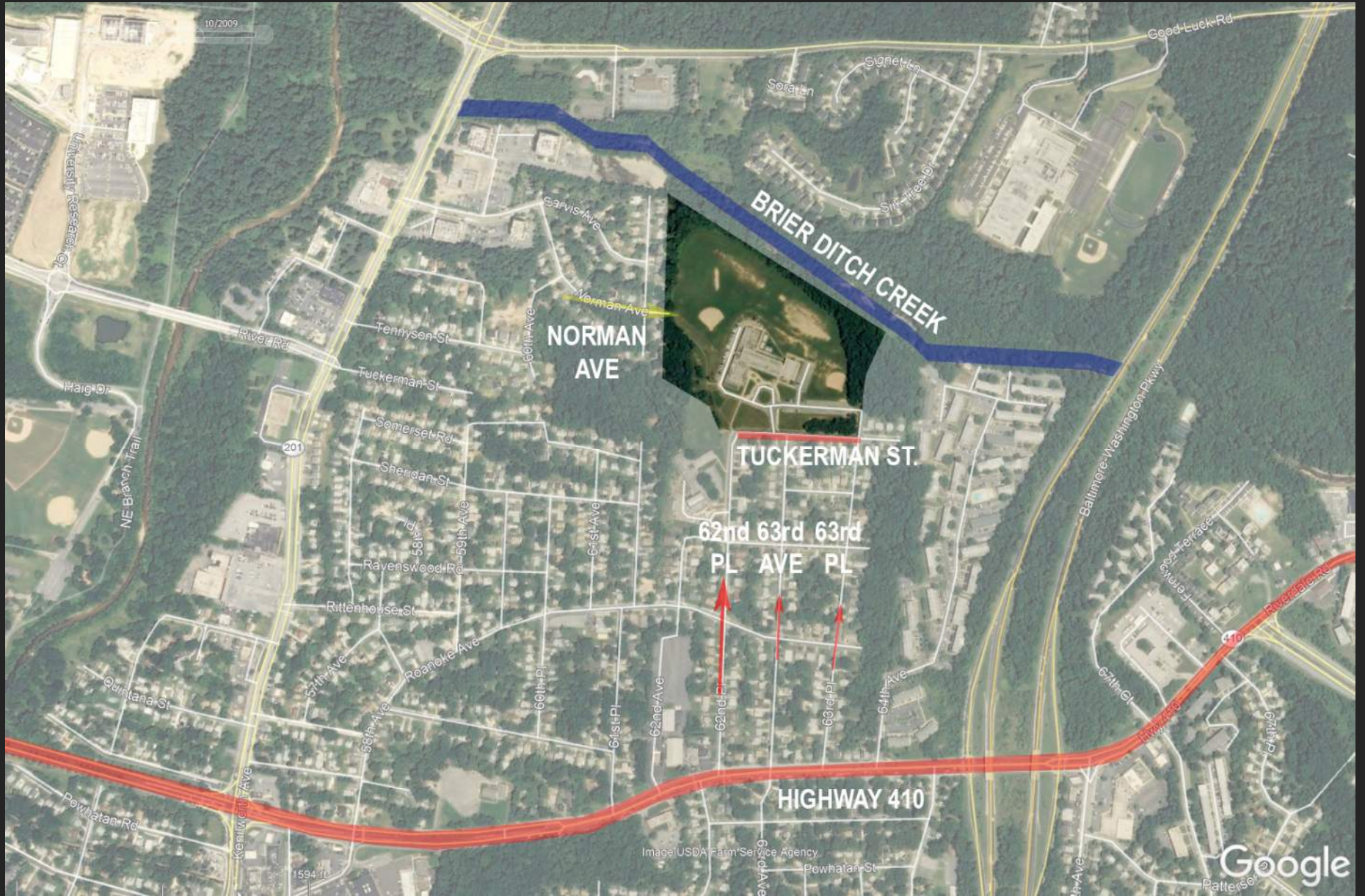
WILLIAM WIRT MIDDLE SCHOOL REPLACEMENT SCHOOL

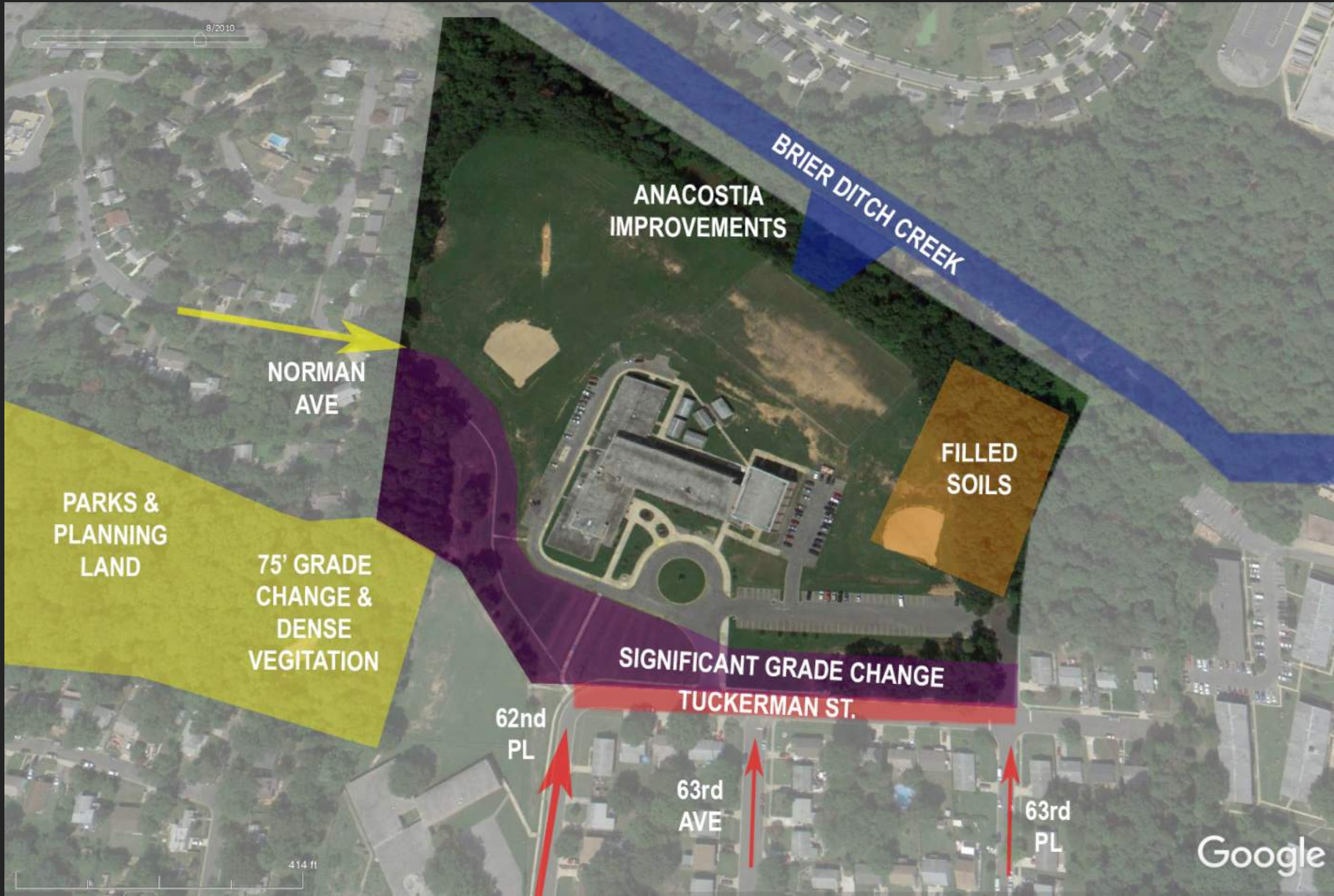
1/31/2018

Phases	2018												2019												2020												2021											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT		
Schematic Design	SCHEMATIC DESIGN																																															
Initial Design Meeting with PGCPSS																																																
Finalize Educational Specifications																																																
Develop Schematic Floor and Site Plans																																																
Design Meeting with PGCPSS to Review Plans																																																
Kick-off Meeting with Consultants																																																
Submit Mand. Referral Form to M-NCPPC																																																
Design Meeting with PGCPSS to Review Plans																																																
Finalize Plans and Develop Exterior Model																																																
Life Cycle Cost Anal. of Bldg. Sys.																																																
Design Meeting with PGCPSS to Finalize Design																																																
Final Approval from BOE																																																
Submit SD Submission to IAC																																																
IAC Review of SD Subm.													REVIEW																																			
IAC and Review																																																
Receive Comments and Provide Responses																																																
Design Development													DES. DEVELOPMENT																																			
Meetings with Faculty and Staff																																																
Perform Geotech Work																																																
Consultant Coordination Meeting																																																
Submit NRI to M-NCPPC																																																
Submit Plans to M-NCPPC for Planning Review																																																
Receive SD Approval from IAC																																																
Consultant Coordination Meeting																																																
Finalize Plans and Elevations																																																
Submit SWM Concept Report to PG Co.																																																
Finalize Building Systems																																																
Submit SDP for SWM/ES&C to PG Co.																																																
(Assuming SWM Concept Approval)																																																
Consultant Coordination Meeting																																																
Submit Drawings to Cost Estimator																																																
Final Approval from BOE																																																
Submit DD Submission to IAC and DGS																																																
IAC and DGS Review of DD Subm.													REVIEW																																			
IAC and DGS Review																																																
Receive Comments and Provide Responses																																																
Construction Documents													CONSTR. DOCUMENTS																																			
Consultant Coordination Meeting (if needed)																																																
50% CD's - Solicit Bid Review Pricing from DP/E																																																
DP/E Bid Review Certified Firms																																																
Receive SDP Comments and Respond																																																
Receive CD Approval from IAC																																																
Consultant Coordination Meeting																																																
SWM/ES&C SDP Approval & Submit for Fine Grading Permit																																																
Finalize Drawings																																																
Receive SDP Approval																																																
Submit Drawings to Cost Estimator																																																
Final Approval from BOE																																																
Sub. CD Submission to DGS																																																
DGS Review of CD Subm.													REVIEW																																			
DGS Review																																																
Receive Comments and Provide Responses																																																
Pre-Bidding													PRE-BID.																																			
Submit to County (DP/E) for Building Permit																																																
In-House Constructability Review																																																
Receive Approval from DGS to Bid																																																
Final Revisions																																																
Send Documents to CRA																																																
Send Documents to Printer																																																
Bidding													BIDDING																																			
Bi Solicitation																																																
Receive Building Permit from County (DP/E)																																																
Pre-Bid Conference																																																
Bids Due @ 2:00 P.M.																																																
Post-Bidding													POST-BID.																																			
Board Approval of Intent to Award																																																
Issue Intent to Award Letter																																																
Receive Approval from State																																																
Receive Insurances, Bonding & Exec. Contract from Contractor																																																
Receive Exec. Contract from Owner																																																
Issue Notice to Proceed																																																
Construction													CONSTRUCTION																																			
New Construction																																																
Move-in to New School																																																
Demolition of Existing Building																																																
Final Closeout																																																

SITE ANALYSIS







8/2010

BRIER DITCH CREEK

ANACOSTIA IMPROVEMENTS

NORMAN AVE

PARKS & PLANNING LAND

75' GRADE CHANGE & DENSE VEGETATION

FILLED SOILS

SIGNIFICANT GRADE CHANGE
TUCKERMAN ST.

62nd PL

63rd AVE

63rd PL

414 ft

Google

concept plans



scheme three
replacement

POTENTIAL
SITE
ACCESS

WETLAND
MEADOW

BUS
LOOP

NEW
BUILDING

PARKING

414 ft



8/2010

NEW BUILDING

POTENTIAL SITE ACCESS

BUS LOOP

PARKING

WETLAND MEADOW











414 ft

Google



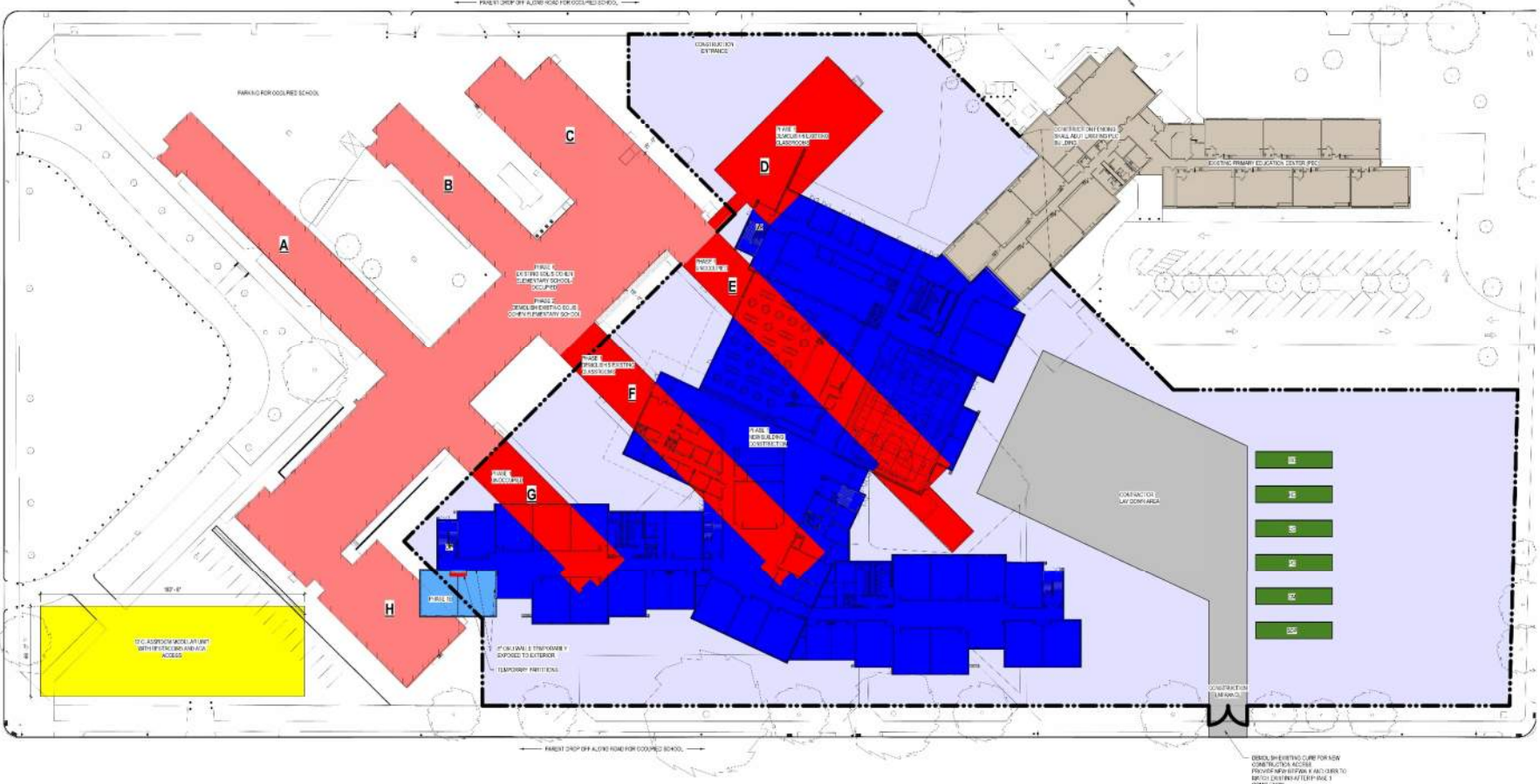
Example Site Phasing for Discussion

SOLIS COHEN ELEMENTARY SCHOOL - PHASING PLAN
 JANUARY 2008 THROUGH JANUARY 2009

 CONSTRUCTION AREA WITH EGRESS OPEN TO THE PUBLIC	 CONSTRUCTION TRAIL FIVE
 BUILDING CONSTRUCTION	 EXISTING PRIMARY EDUCATION CENTER
 BUILDING DEMOLITION - PHASE 1	 MAIN ENTRANCE FOR COOPERED SCHOOL
 COOPERED SCHOOLS TO BE DEMOLISHED IN PHASE 2	 SIDEWALK ACCESS FOR COOPERED SCHOOL
 CLASSROOM BOLLARD UNIT WITH RESTROOMS AND ADA ACCESS	 PARKING ACCESS FOR COOPERED SCHOOL

PRINCETON AVENUE
 (75' WIDE R.O.W.) (LEGALLY OPEN)
 (17'-30" - 17') (ON CITY PLAN)

PRINCETON AVENUE
 (57' WIDE R.O.W.) (LEGALLY OPEN)
 (17'-30" - 17') (ON CITY PLAN)



EDUCATIONAL SPECIFICATIONS

William Wirt Middle School Program			Grades 6, 7, & 8 - 3 Teams Per Grade				1/17/2018			
ROOM/SPACE	TEACHING STATIONS	NUMBER EACH	SF EACH	TOTAL	SF TALLY	STUDENTS / ROOM	CAPACITY	COMMENTS		
01 ADMINISTRATION						5,400				
01.01	ADMIN. ASSISTANT'S OFFICE	1	120	120						
01.02	ADMIN. WORKROOM	1	200	200						
01.03	BUSINESS MANAGERS OFFICE	1	150	150						
01.04	CONFERENCE ROOM	1	300	300						
01.05	ENTRANCE LOBBY	1	1000	1000						
01.06	MAIL ROOM	1	150	150						
01.07	PRINCIPAL'S OFFICE	1	230	230						
01.08	RECEPTION / WAITING	1	600	600						
01.09	SECURITY CENTER - OFFICE	1	200	200						
01.10	STAFF BREAK ROOM	1	800	800						
01.11	STORAGE ROOM (General Supplies)	1	250	250						
01.12	TEXT BOOK ROOM	1	600	600						
01.13	STAFF TOILET	1								
01.14	INSTRUCTIONAL SPECIALISTS									
01.15	COLLABORATION SPACE	1	200	200						
01.16	WORKSTATIONS	5	120	600						
02 GUIDANCE / STUDENT SERVICES						1,360				
02.01	RECEPTION / WORK AREA	1	300	300						
02.02	CONFERENCE / TESTING ROOMS	2	250	500						
02.03	OFFICES	3	120	360						
02.04	RECORDS STORAGE ROOM	1	150	150						
02.05	TOILET (Adult)	1	50	50						
03 HEALTH						775				
03.01	COTS	2	100	200						
03.02	OFFICE	1	100	100						
03.03	RECEPTION / WAITING	1	200	200						
03.04	STORAGE	1	50	50						
03.05	TOILET	2	50	100						
03.06	TREATMENT AREA	1	125	125						

William Wirt Middle School Program			Grades 6, 7, & 8 - 3 Teams Per Grade				1/17/2018			
		ROOM/SPACE	TEACHING STATIONS	NUMBER EACH	SF EACH	TOTAL	SF TALLY	STUDENTS / ROOM	CAPACITY	COMMENTS
04 ACADEMIC CORE AREAS								56,700		
	04.01	GRADES 6 READING		3	850	2550		25	75	
	04.02	GRADES 8 MATH		3	850	2550		25	75	
	04.03	GRADES 8 SOCIAL STUDIES		3	850	2550		25	75	
	04.04	GRADES 7 READING		3	850	2550		25	75	
	04.05	GRADES 7 MATH		3	850	2550		25	75	
	04.06	GRADES 7 SOCIAL STUDIES		3	850	2550		25	75	
	04.07	GRADES 8 READING		3	850	2550		25	75	
	04.08	GRADES 8 MATH		3	850	2550		25	75	
	04.09	GRADES 8 SOCIAL STUDIES		3	850	2550		25	75	
	04.10	FLEX CLASSROOMS		3	850	2550		25	75	
	04.11	ESOL CLASSROOMS		3	850	2550		20	60	One per Grade Group
	04.12	AVID CLASSROOMS		3	850	2550		20	60	One per Grade Group
	04.13	READING CLASSROOMS		3	850	2550		20	60	One per Grade Group
	04.14	HEALTH LAB		3	850	2550		25	75	One per Grade Group
	04.15	ALTERNATIVE EDUCATION ROOMS		2	450	900				ISS / Mediation
	04.16	COLLABORATIVE LEARNING AREAS		3	1050	3150				Independent and informal learning areas
	04.17	OUTDOOR LEARNING AREAS		3	1000					Size can vary from 100-1000
	04.18	SCIENCE LAB		8	1200	9600		24	192	
	04.19	SCIENCE PREP		3	200	600				One per Grade
	04.20	SMALL GROUP RESOURCE ROOMS		6	400	2400				2 Per Team / Paired for Flexibility
	04.21	SPEECH / OT / PT		1	300	300				
	04.22	STEM LAB		1	1800	1800		25	25	
	04.23	STORAGE		3	300	900				
	04.24	ASSISTANT PRINCIPALS		3	150	450				One per Grade
	04.25	TEACHER SUPPORT AREAS		3	300	900				One per Grade

William Wirt Middle School Program			Grades 6, 7, & 8 - 3 Teams Per Grade				1/17/2018	
ROOM/SPACE	TEACHING STATIONS	NUMBER EACH	SF EACH	TOTAL	SF TALLY	STUDENTS / ROOM	CAPACITY	COMMENTS
05 SPECIAL EDUCATION						3,550		
05.01	CLASSROOMS	3	800	2400				
05.02	DE-ESCALATION	1	90	90				
05.03	LIFE SKILLS LAB	1	400	400				
05.04	CONFERENCE ROOM	1	200	200				
05.05	OFFICES	3	120	360				
05.06	STORAGE	1	100	100				
06 MEDIA CENTER						6,200		
06.01	LIBRARY COMMONS	1	3300	3300				
06.02	INDEPENDENT ONLINE LEARNING	1	800	800				
06.03	PRODUCTION MULIMEDIA STUDIO	1	310	310				
06.04	CONTROL ROOM	1	100	100				
06.05	EQUIPMENT STORAGE	1	250	250				
06.06	OFFICE	1	150	150				
06.07	STAFF DEVELOPMENT / CONF ROOM	1	750	750				
06.08	TELECOM HEAD END ROOM	1	200	200				
06.09	TOILET (Staff)	1	40	40				
06.10	WORKROOM	1	300	300				
07 VISUAL ARTS						3,100		
07.01	STUDIO	2	1300	2600		25	50	
07.02	STORAGE	1	100	100				
07.03	KILN	2	200	400				
08 PERFORMING ARTS						8,335		
08.01	BAND / ORCHESTRA ROOM	1	1800	1800		25	25	
08.02	CHORAL / KEYBOARD ROOM	1	1500	1500		25	25	
08.03	CHORAL STORAGE	1	100	100				
08.04	INSTRUMENT STORAGE	1	350	350				
08.05	INSTRUMENT PRACTICE ROOMS	1	160	160				
08.06	STAGE SUPPORT	1	850	850				
08.07	STAGE SUPPORT	1	1250	1250				
08.08	SOUND AND LIGHT ROOM	1	75	75				
08.09	STORAGE	1	450	450				
08.10	DANCE STUDIO	1	1800	1800		25	25	
08.11	BATHROOM W CHANGING AREA	2						

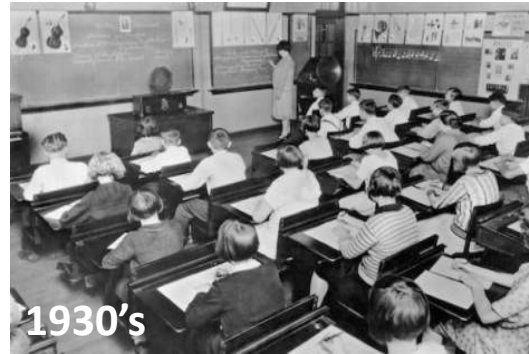
William Wirt Middle School Program			Grades 6, 7, & 8 - 3 Teams Per Grade				1/17/2018			
		ROOM/SPACE	TEACHING STATIONS	NUMBER EACH	SF EACH	TOTAL	SF TALLY	STUDENTS / ROOM	CAPACITY	COMMENTS
09 PHYSICAL EDUCATION							14,750			
	09.01	LOBBY		1	1000	1000				
	09.02	GYMNASIUM		1	5800	5800		100	100	
	09.03	BLEACHER SEATING		1	3400	3400				
	09.04	DANCE STUDIO			150	0				
	09.05	FITNESS ROOM		1	1400	1400				
	09.06	LAUNDRY		1	100	100				
	09.07	LOCKER ROOMS/ SHOWERS		2	850	1700				
	09.08	OFFICES (Department)		1	450	450				
	09.09	STORAGE		3	300	900				
10 STUDENT DINING AND FOOD SERVICE							10,070			
	10.01	CAFETERIA / COMMONS		1	6000	6000				
	10.02	CHAIR STORAGE		1	600	600				
	10.03	FOOD SERVICE RECEIVING		1	200	200				
	10.04	KITCHEN		1	2000	2000				
	10.05	OFFICE		1	120	120				
	10.06	SERVING AREA		1	1000	1000				
	10.07	TOILET / LOCKER ROOM		1	150	150				
11 MAINTENANCE AND CUSTODIAL							1,350			
	11.01	CUSTODIAL OFFICE		1	150	150				
	11.02	CUSTODIAL STORAGE		1	300	300				
	11.03	RECEIVING AND Storage		1	600	600				
	11.04	TOILET / SHOWER / LOCKERS		2	150	300				

William Wirt Middle School Program			Grades 6, 7, & 8 - 3 Teams Per Grade				1/17/2018	
ROOM/SPACE	TEACHING STATIONS	NUMBER EACH	SF EACH	TOTAL	SF TALLY	STUDENTS / ROOM	CAPACITY	COMMENTS
12 COMMUNITY USE						2,520		
12.01	CLASSROOM / MEETING ROOM	1	800	800				
12.02	FAMILY ROOM	1	300	300				
12.03	PANTRY	1	300	300				
12.04	RECEPTION	1	150	150				
12.05	PARTNER OFFICE	1	250	250				
12.06	CIRCULATION ETC.	1	720	720				
TOTALS								
	Total Net Square Footage				114,110			
	Grossing Factor	0.5			57,055			
	TOTAL GROSS AREA				171,165	1,447		
	Middle School Capacity				1,447			
	85% (per State Requirements)				1,230			
	TOTAL SCHOOL CAPACITY				1,230			
13 SITE REQUIREMENTS / ATHLETICS						400		
13.01	(1) 400 METER TRACK - 200 METER STRAIGHT							
13.02	(2) BASKETBALL COURTS							
13.03	(00) BUS PARKING SPACES							
13.04	EXTERIOR GROUNDS EQUIPMENT STORAGE	1	400	400				May be used for play area during day
13.05	(1) SOCCER FIELD							
13.06	(1) SOFTBALL FIELD							
13.07	(1) BASEBALL FIELD (IF FEASIBLE)							
13.08	GARDENS AND OUTDOOR LEARNING SPACES							

21ST CENTURY LEARNING

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



1930's

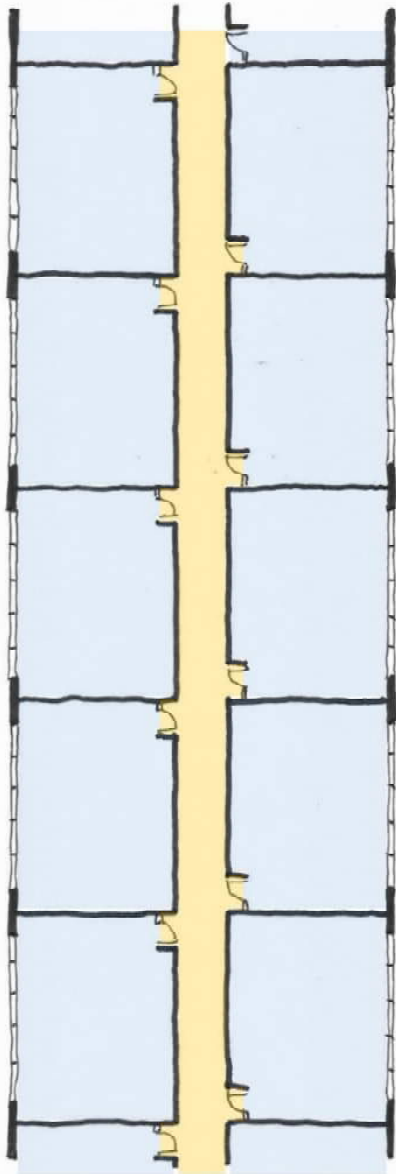


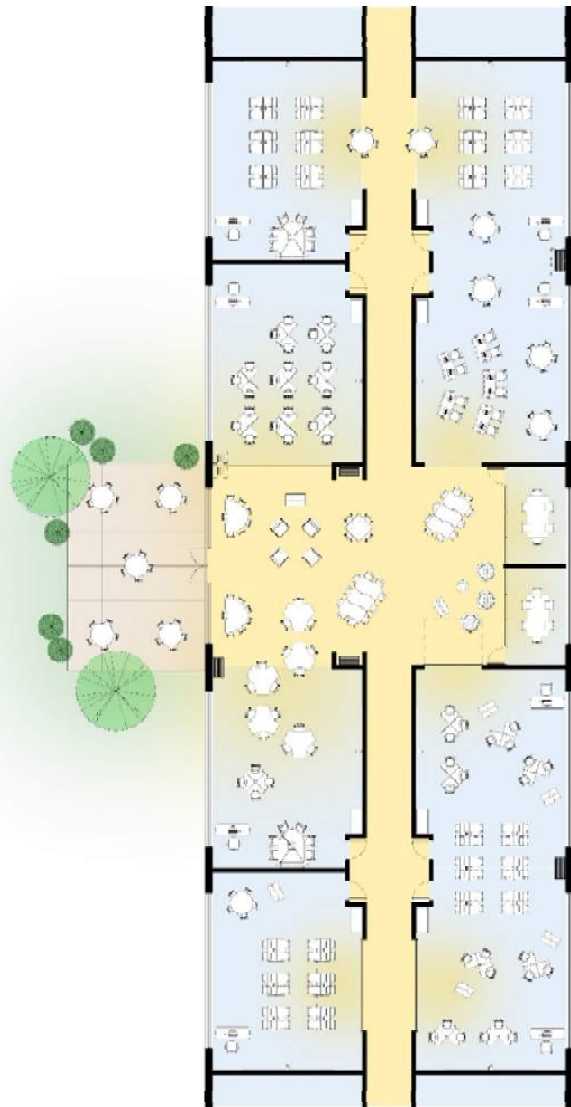
1950's



1980's

2020's ???????



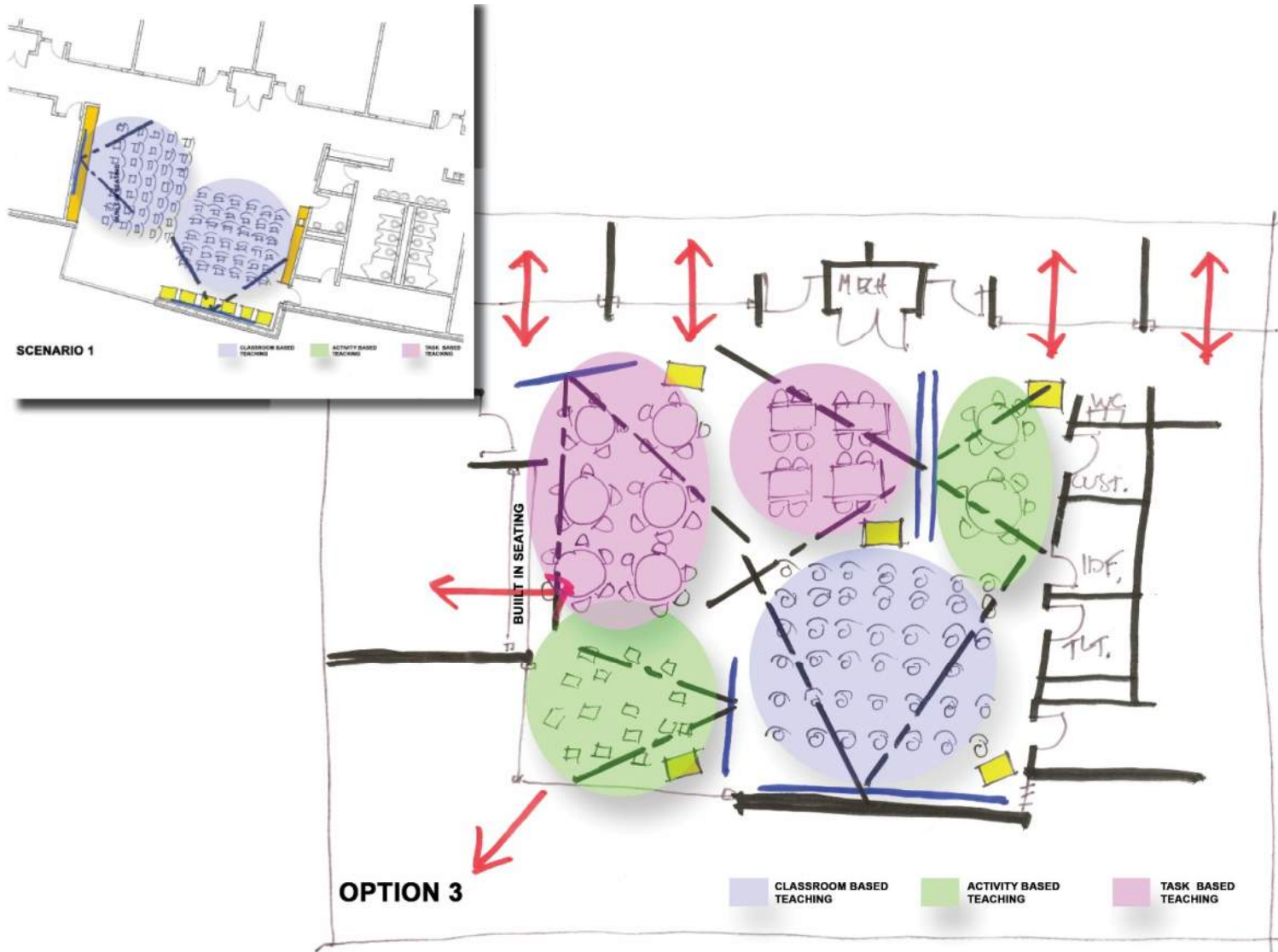






21ST CENTURY LEARNING

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

COLLABORATIVE ENVIRONMENTS

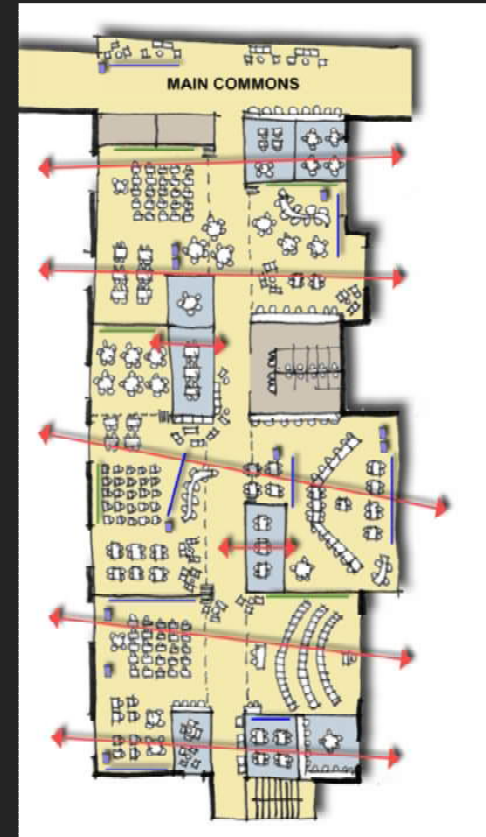
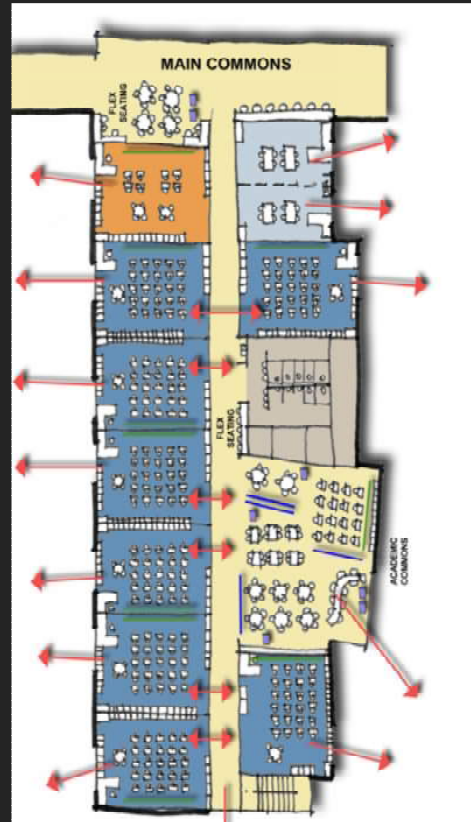
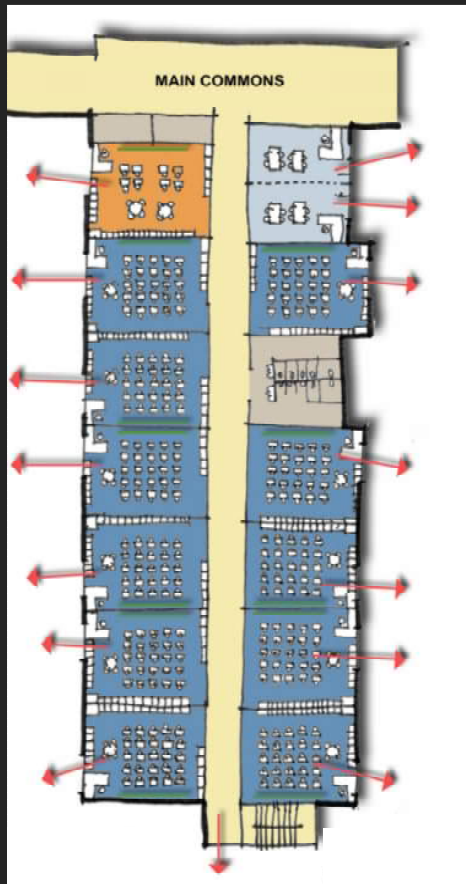


 VIEWS/ VISUAL CONNECTION
 TEACHING WALL
 MOBILE CASEWORK
 FIXED CASEWORK

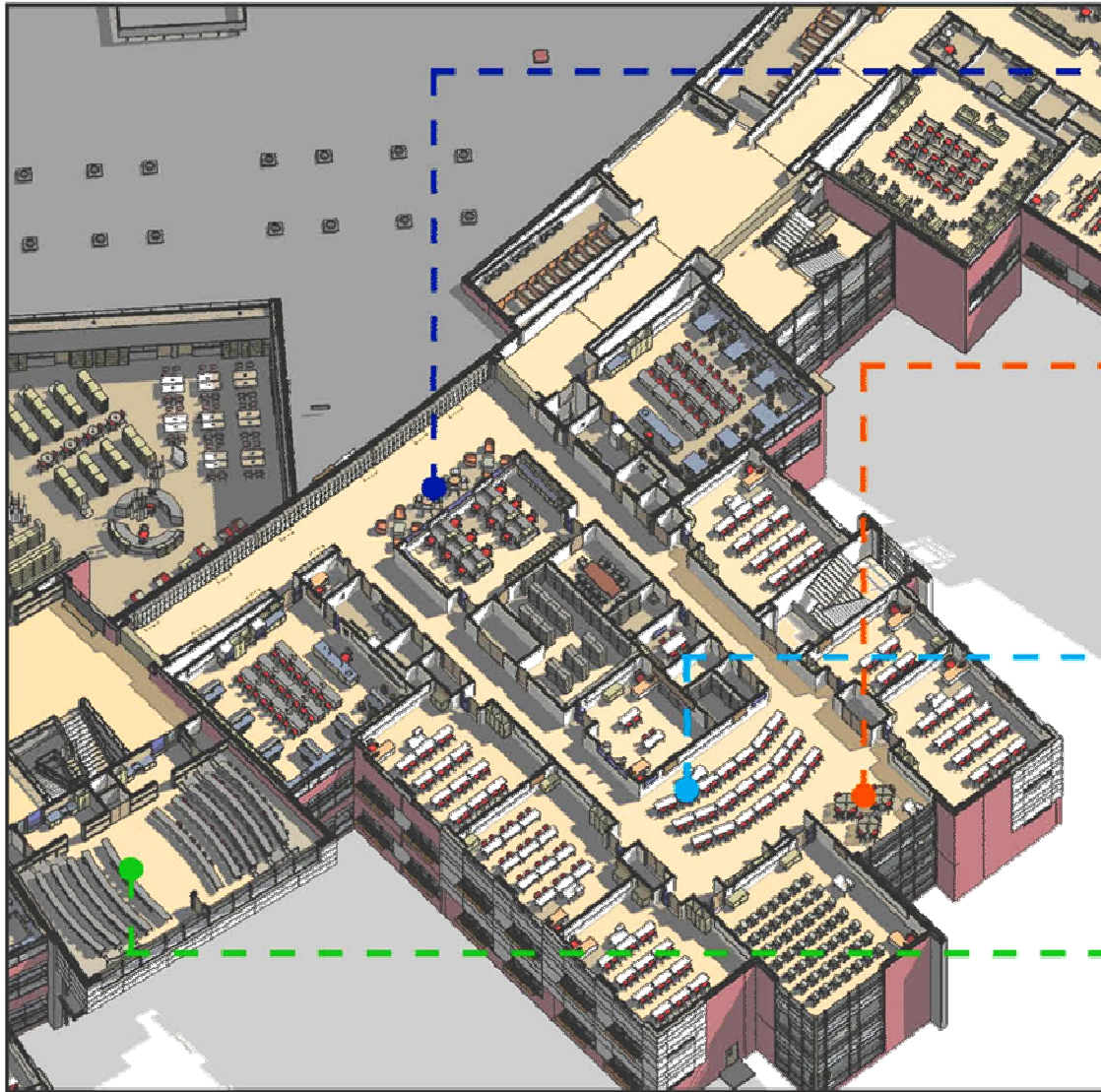
- COMBINATION OF OPTION 1 AND 2
- FULLY FLEXIBLE SPACE.
- FIXED TEACHING WALL AT EXTERIOR WALL.
- FULL DEPENDENCE ON MOBILE CASEWORK AND TEACHING WALLS TO ACCOMMODATE ALL GROUP SIZES.
- NO TEACHER'S WORK AREA.
- NO FIXED CASEWORK. LOW CASEWORK CAN BE ADDED IN LIEU OF FIXED SEATING SHOWN.
- EXPOSED DOORS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

21ST CENTURY LEARNING

EARLY STUDY CLASSROOM WING STUDIES
DEVIATES FROM ORIGINAL PROGRAM



WHAT IS YOUR SCHOOL COMMUNITY COMFORTABLE ENGAGING?



CREATIVITY

Individual Study
1 - 4 People



CRITICAL THINKING

Small Group Collaboration
4 - 12 People



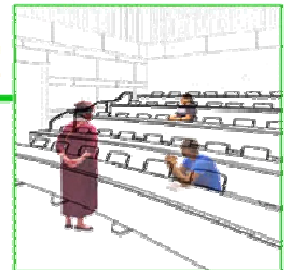
COLLABORATION

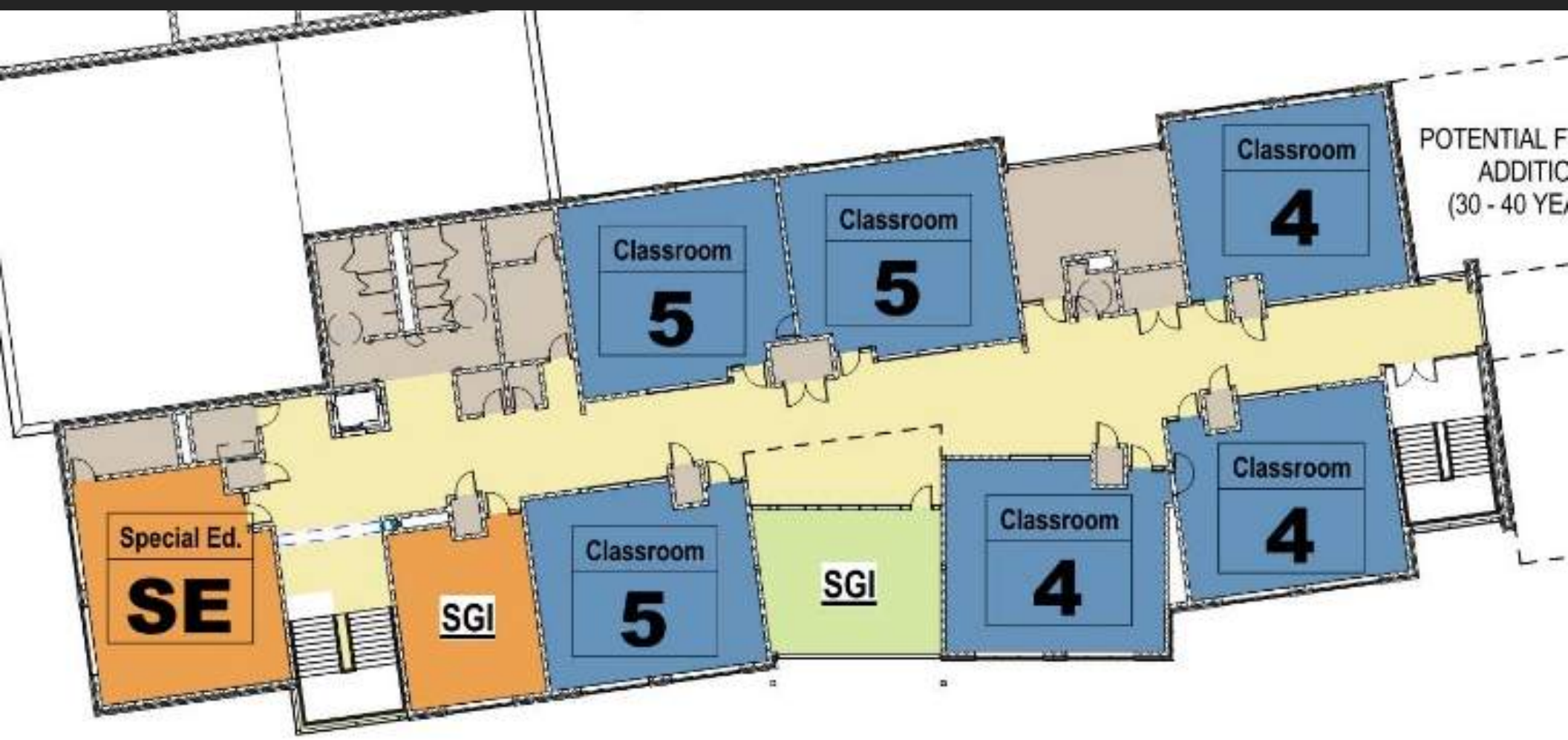
Classroom Collaboration
12 - 25 People



COMMUNICATION

Large Group Collaboration
25 - 90 People





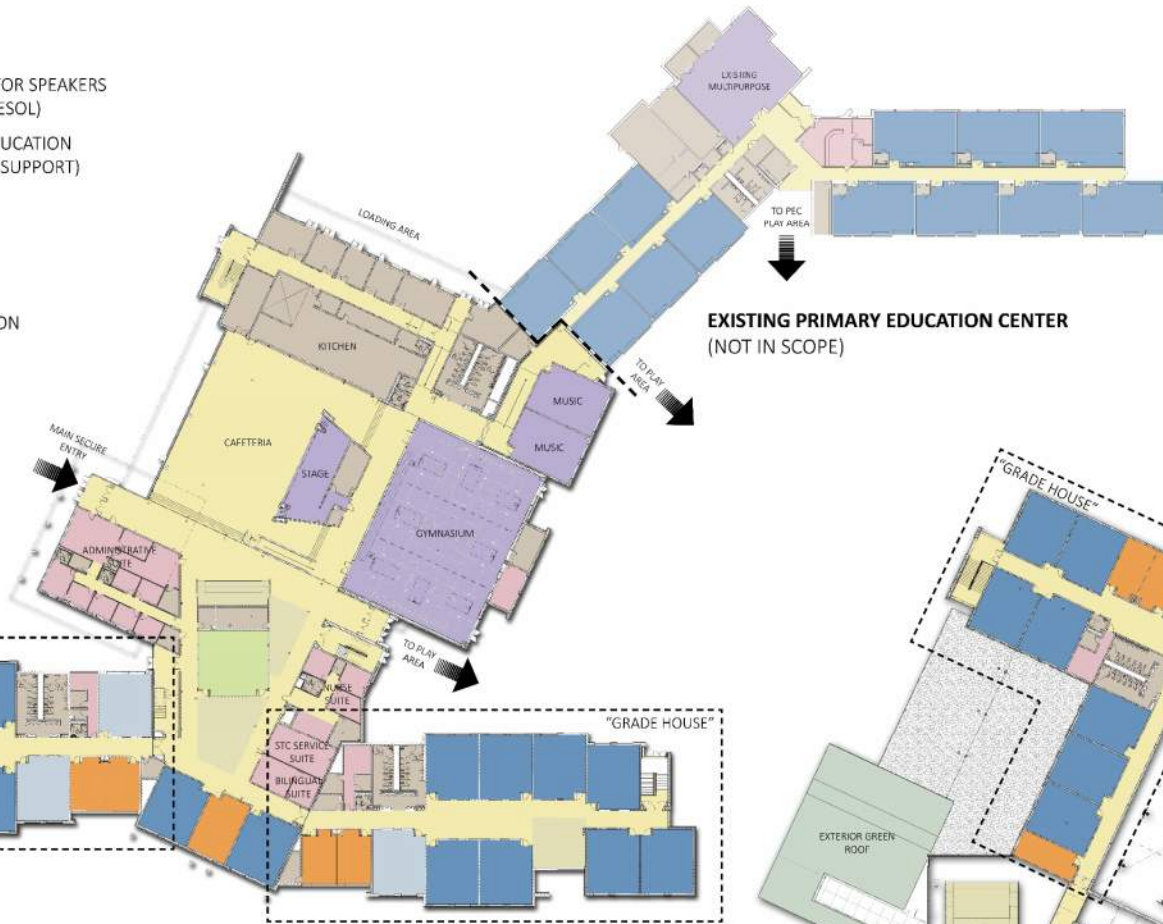
POTENTIAL F
ADDITIO
(30 - 40 YE







- CLASSROOMS
- CLASSROOM - ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)
- CLASSROOM - SPECIAL EDUCATION (AUTISTIC & EMOTIONAL SUPPORT)
- COMPUTER CLASSROOM
- SCIENCE CLASSROOM
- OPEN GROUP INSTRUCTION
- SPECIALTY EDUCATIONAL SPACES
- ADMINISTRATION
- SUPPORT SPACES
- CIRCULATION



OVERALL FIRST FLOOR PLAN



OVERALL SECOND FLOOR PLAN

