

IRMO HIGH SCHOOL
EAST WING REPLACEMENT
SCHEMATIC DESIGN UPDATE

FEBRUARY 13, 2023

DESIGN PROCESS

VISIONING & PROGRAMMING

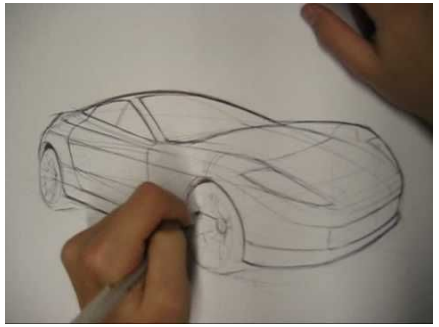
CONCEPTUAL DESIGN

SCHEMATIC DESIGN

DESIGN DEVELOPMENT

CONSTRUCTION DOCUMENTS & BIDDING











DESIGN PROCESS – VISIONING & PROGRAMMING

VISIONING & PROGRAMMING

- Student and Community Input
- Extensive programming meetings with Dr. Hampton





EXISTING EAST WING

GENERAL CLASSROOMS

SPACE	Number of Students (in each)	Number of Existing Spaces	Number of New Spaces	Student Capacity	Existing S.F. @	Existing S.F.	New S.F. @	New S.F.	Student Capacity	NOTES
GENERAL CLASSROOMS										
English Classrooms	25	12	11	206	650	7,800	800	8,800	206	Do you really have 25 students per class?
Social Studies Classrooms	25	12	11	206	650	7,800	800	8,800	206	
Math Classrooms	25	12	11	206	650	7,800	800	8,800	206	
Computer Labs	0	4	2	0	700	2,800	800	1,600	0	2 would suffice in new classrooms. School is 1:1 Probably used every other day. 25 students typ. Use space. Same size as standard classroom
Vacant Classrooms	0	9	0	0	700	6,300	0	0	0	
Subtotal General Classrooms								28,000	619	
SCIENCE CLASSROOMS/LABS										
Science Classrooms	25	9	10	188	650	5,850	800	8,000	188	
Science Lab/Classroom	25	1	0	0	1400	1,400	1,400	0	0	
Science Labs	0	7	5	0	1400	9,800	1,400	7,000	0	Students are either in lab or in classroom
Prep Area	0	8	5	0	325	2,600	300	1,500	0	Prep area includes storage
Storage	0	3	3	0	186	558	100	300	0	
Subtotal Science Classrooms/Labs								16,800	188	
Art Classrooms										
Art Classrooms	25	3	2	38	1250	3,750	1,200	2,400	38	2 will suffice
Office	0	2	0	0	100	200	0	0	0	don't need office
Storage	0	4	2	0	140	560	200	400	0	
Kiln	0	1	1	0	130	130	100	100	0	shared
View Room	0	1	0	0	170	170	0	0	0	No photography
Dark Room	0	1	0	0	120	120	0	0	0	
Outdoor Art Patio		0	1							Locate so it has access outside
Subtotal Art Classrooms								2,900	38	
TOTAL CLASSROOMS				844		57,638		47,700	1,031	

SPECIAL EDUCATION

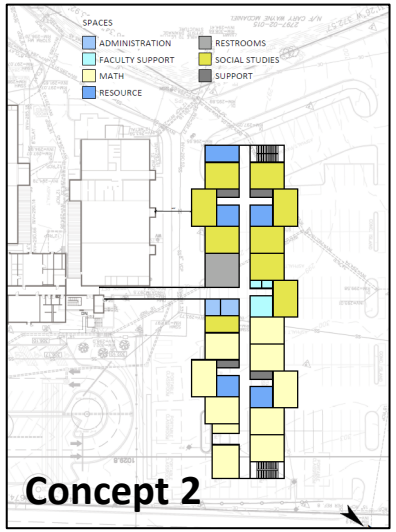
SPACE	Number of Students (in each)	Number of Existing Spaces	Number of New Spaces	Student Capacity	S.F. @	SF	New S.F. @	New S.F.	Student Capacity	NOTES
Resource Classrooms	15	7	6		700	4,900	400	2,400	45	teachers have 6 classes
ESOL	20		1				400	400	10	
TOTAL RESOURCE				0		4,900		2,800	55	

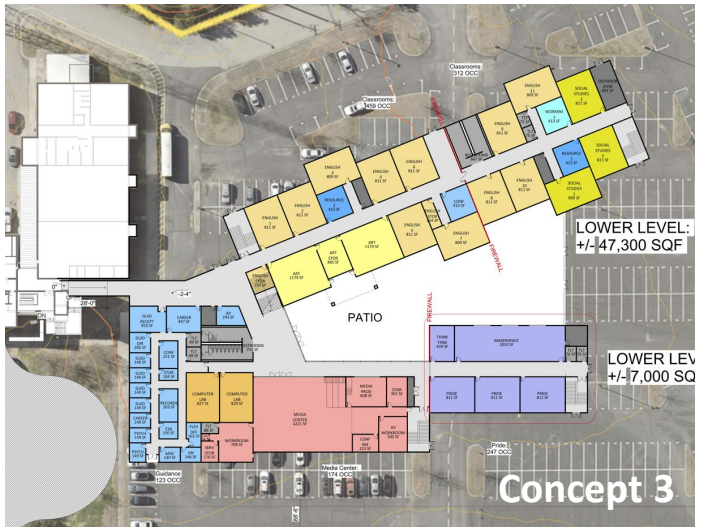
DESIGN PROCESS – CONCEPTUAL DESIGN

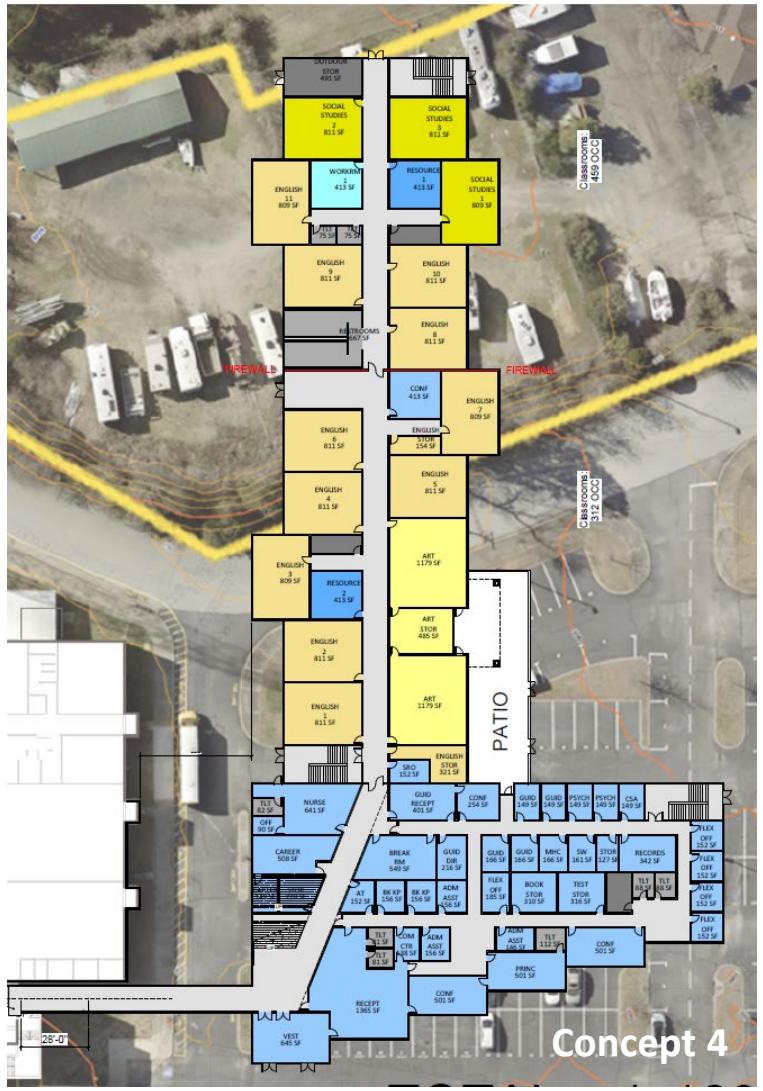
CONCEPTUAL DESIGN

- Site Layouts, Bubble Diagrams and Adjacencies
- Design Team Estimate
- Current Market Trends Construction Costs/SF
- +20% Typical Soft Costs









DESIGN PROCESS – SCHEMATIC DESIGN

SCHEMATIC DESIGN

- 25% Documentation; Project Narratives/No Specifications
- 3rd Party Estimate Construction Costs/SF
- Rough Material Takeoffs
- Includes 15% Design and Estimating Contingency
- +20% Typical Soft Costs

Aiken Cost Consultants

BUILDING SUMMARY
Schematic Design Estimate
FOR
East Wing Replacement
Irmo High School
Columbia, SC

Architect:	Owner:	Cost Estimator:
LS3P Associates Ltd.	School District 5	Aiken Cost Consultants
701-A Lady Street	Lexington and Richland Counties	19 West Stone Avenue
Columbia, SC 29201	Columbia, SC	Greenville, SC 29609

Project Data

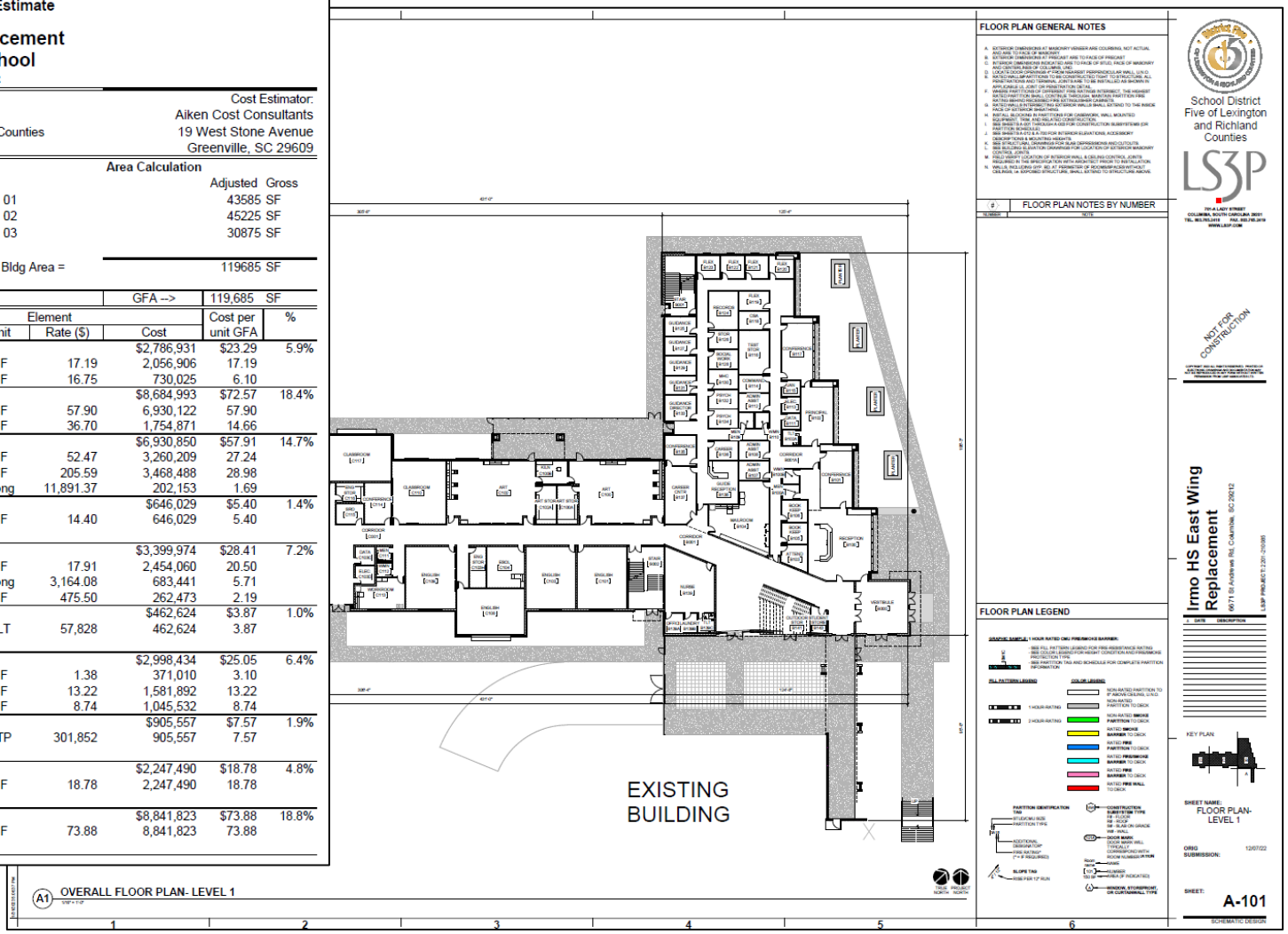
Project Code:	LS3218
Type of Work:	Addition
Mid Point of Construction:	Dec 2024
Est Const Duration:(Months)	24
Owners Budget:	Unknown
ACC Last Estimate:	NA

Area Calculation

	Adjusted	Gross
Level 01	43585	SF
Level 02	45225	SF
Level 03	30875	SF
Total Bldg Area =	119685	SF

Project: East Wing Replacement — GFA --> 119,685 SF

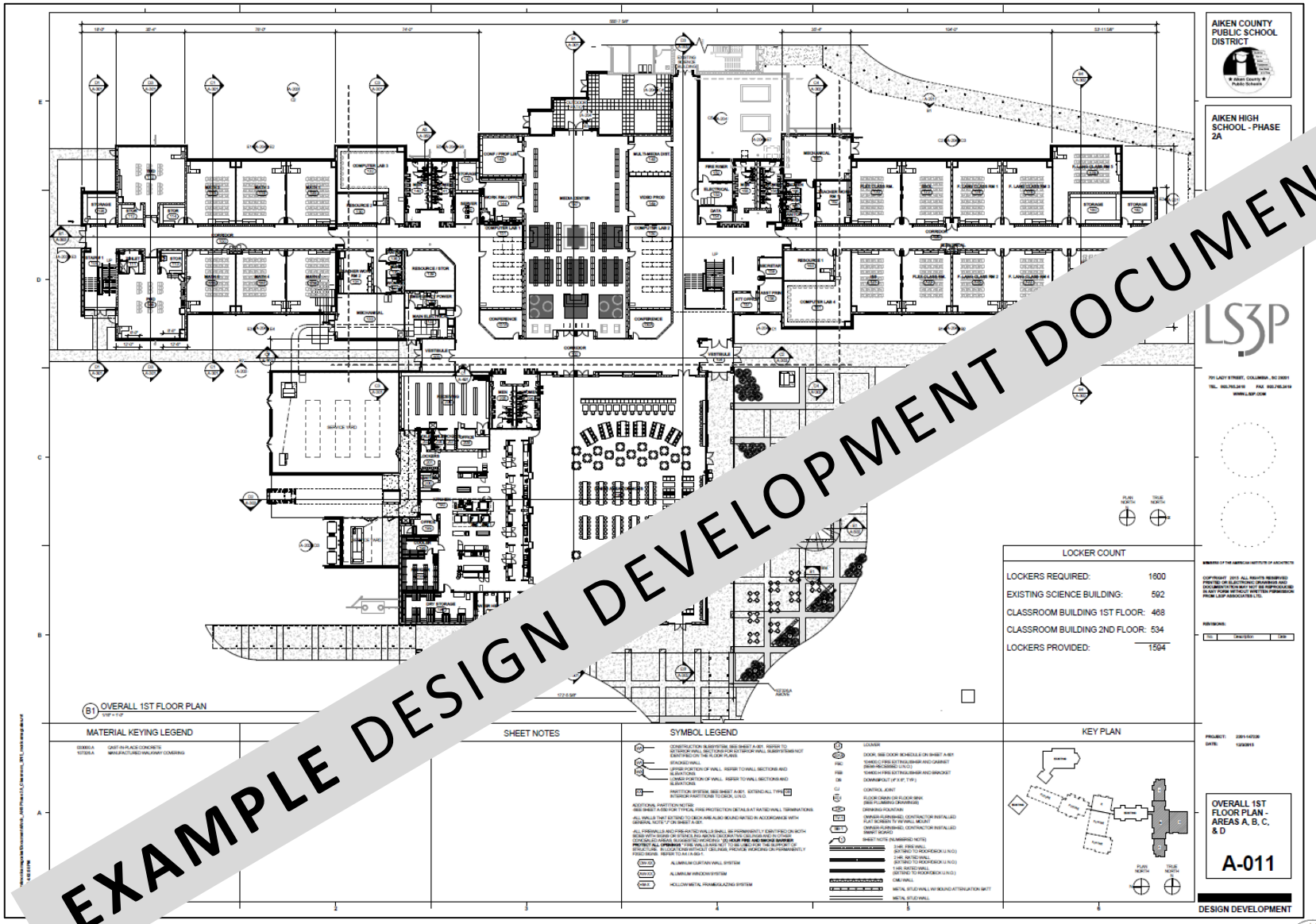
LEVEL 2 GROUP ELEMENTS / Level 3 Elements	Quantity	Unit	Rate ($)	Cost	Cost per unit GFA	%
A10 FOUNDATION SYSTEM				$2,786,931	$23.29	5.9%
A1010 Standard Foundations	119685	SF	17.19	2,056,906	17.19	
A1030 Slab On Grade	43585	SF	16.75	730,025	6.10	
B10 SUPERSTRUCTURE				$8,684,993	$72.57	18.4%
B1010 Floor Construction	119685	SF	57.90	6,930,122	57.90	
B1020 Roof Construction	47821	SF	36.70	1,754,871	14.66	
B20 EXTERIOR CLOSURE				$6,930,850	$57.91	14.7%
B2010 Exterior Walls	62133	SF	52.47	3,260,209	27.24	
B2020 Exterior Windows	16871	SF	205.59	3,468,488	28.98	
B2030 Exterior Doors	17	Opng	11,891.37	202,153	1.69	
B30 ROOFING				$646,029	$5.40	1.4%
B3010 Roof Coverings	44866	SF	14.40	646,029	5.40	
C10 INTERIOR CONSTRUCTION				$3,399,974	$28.41	7.2%
C1010 Partitions	137035	SF	17.91	2,454,060	20.50	
C1020 Interior Doors	216	Opng	3,164.08	683,441	5.71	
C1030 Fittings (Specialties)	552	SF	475.50	262,473	2.19	
C20 STAIRCASES				$462,624	$3.87	1.0%
C2010 Stair Construction	8	FLT	57,828	462,624	3.87	
C30 INTERIOR FINISHES				$2,998,434	$25.05	6.4%
C3010 Wall Finishes	268160	SF	1.38	371,010	3.10	
C3020 Floor Finishes	119685	SF	13.22	1,581,892	13.22	
C3030 Ceiling Finishes	119685	SF	8.74	1,045,532	8.74	
D10 CONVEYING SYSTEMS				$905,557	$7.57	1.9%
D1010 Elevators	3	STP	301,852	905,557	7.57	
D20 PLUMBING				$2,247,490	$18.78	4.8%
D2010 Plumbing Fixtures	119685	SF	18.78	2,247,490	18.78	
D30 HVAC				$8,841,823	$73.88	18.8%
D3020 HVAC Systems	119685	SF	73.88	8,841,823	73.88	



DESIGN PROCESS – DESIGN DEVELOPMENT

DESIGN DEVELOPMENT

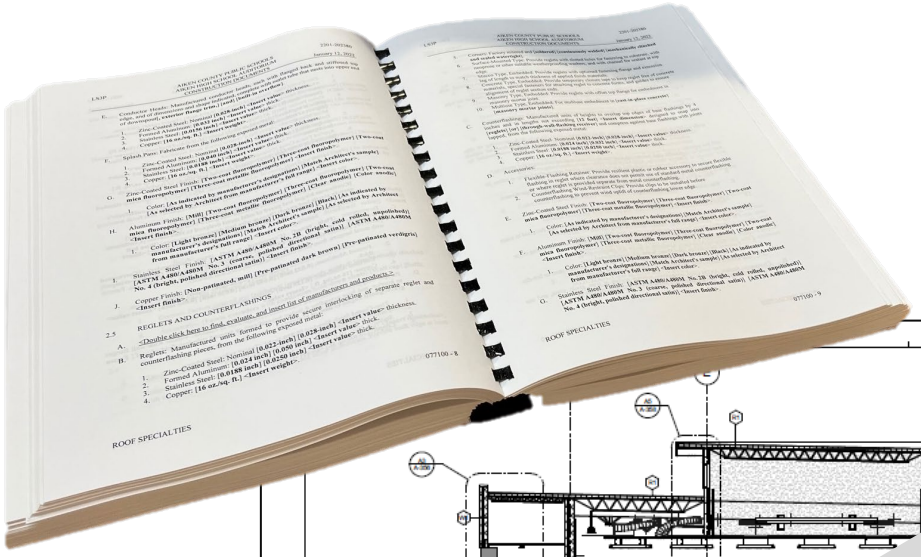
- 50% Documentation; Outline Specifications
- 3rd Party Estimate Construction Costs/SF
- Detailed Material Takeoffs
- Includes 10% Design and Estimating Contingency
- +20% Typical Soft Costs

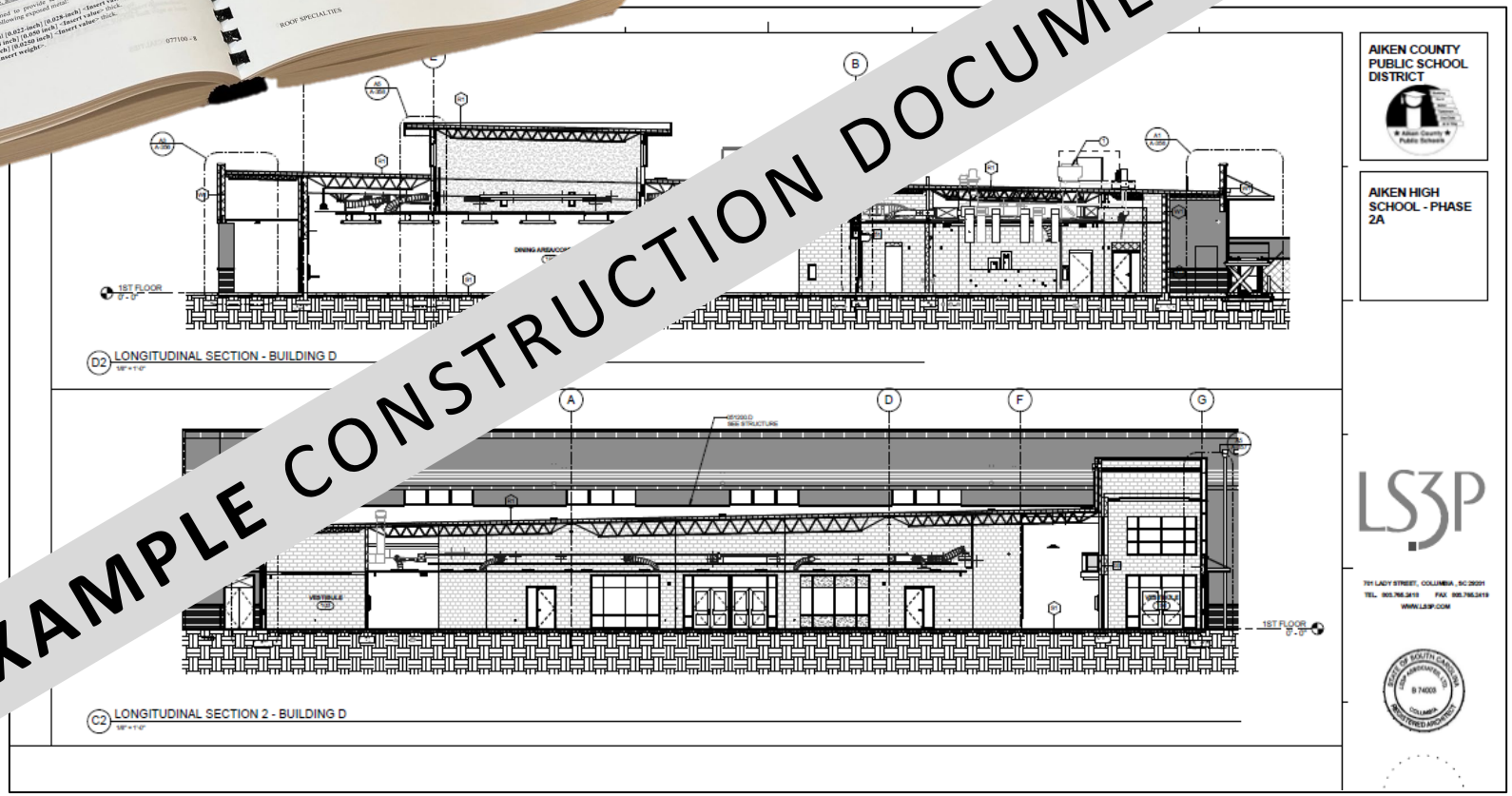


EXAMPLE DESIGN DEVELOPMENT DOCUMENT

DESIGN PROCESS – CONSTRUCTION DOCUMENTS

CONSTRUCTION DOCUMENTS & BIDDING





EXAMPLE CONSTRUCTION DOCUMENTS

- 100% Complete Documentation; Detailed Specifications
- 3rd Party Estimate Construction Costs/SF
- Very Detailed Material Takeoffs
- Includes 0-5% Design and Estimating Contingency
- +20% Typical Soft Costs

TOTAL PROJECT BUDGET

CONSTRUCTION COST + OTHER OWNER SOFT COSTS FOR PROJECT

CONSTRUCTION "HARD" COSTS

CONSTRUCTION COST (BID OR GMP)

***Note: What the Contactor gets paid**

+

OTHER OWNER "SOFT" COSTS

OTHER OWNER COSTS FOR PROJECT (COSTS NOT IN BID OR GMP)

***Note: A/E Fees, Surveys, Geotechnical, Furniture, Technology, Security Equipment, Asbestos Testing and Abatement, Lawyer Fees, 3rd Party Inspections, Bid Advertising, Closeout Consultant, 5% Construction Contingency, etc.**

=

TOTAL PROJECT COSTS

TOTAL PROJECT COST

(HOW MUCH FUNDING THE DISTRICT NEEDS FOR THE ENTIRE PROJECT)

PROJECT SCHEDULE AND COSTS

PHASE	TIMELINE (# of Months)	TOTAL PROJECT COST INFORMATION	ESTIMATES TO DATE
Visioning / Programming	2 Months	**0% of "Known" Costs**	**$49,000,000** District's Original Total Project Budget
Conceptual Design (Site Layouts, Bubble Diagrams and Adjacencies)	2 Months	Current Market Trends Construction Costs/SF Estimate + 20% Typical Soft Costs*	$46,200,000 Construction Costs $9,240,000 Soft Costs* **$55,440,000** Total Project Estimate**
			***Note: New site costs not known for this estimate.*
Schematic Design (25% Documentation; project narratives/no specifications)	4 Months	3rd Party Estimate Construction Cost/SF Rough Material Takeoffs (**15% Design and Estimating Contingency**) + 20% Typical Soft Costs*	$51,805,806 Construction Costs $10,361,161 Soft Costs* **$62,166,967** Total Project Estimate
*** Actual "Soft" Costs TBD by the District – these are just estimates based on "typical" soft costs for similar projects.**			

PROJECT SCHEDULE AND COSTS

PHASE	TIMELINE (# of Months)	TOTAL PROJECT COST INFORMATION	ESTIMATES TO DATE
Design Development (50% Documentation; outline specifications)	5 Months	3rd Party Estimate Construction Costs Detailed Material Takeoffs (**10% Design and Estimating Contingency**) + 20% Typical Soft Costs*	TBD
Construction Documents (100% Complete Documentation and Detailed Specifications)	5 Months	3rd Party Estimate Construction Costs More Detailed Quantity Takeoffs (**0-5% Design and Estimating Contingency**) + 20% Typical Soft Costs*	TBD
Bidding	2 Months	**100% of "Known" Costs**	**TBD**
Total	**20 Months**	**Note: Total of 20 Months to determine 100% of "Known" Costs**	

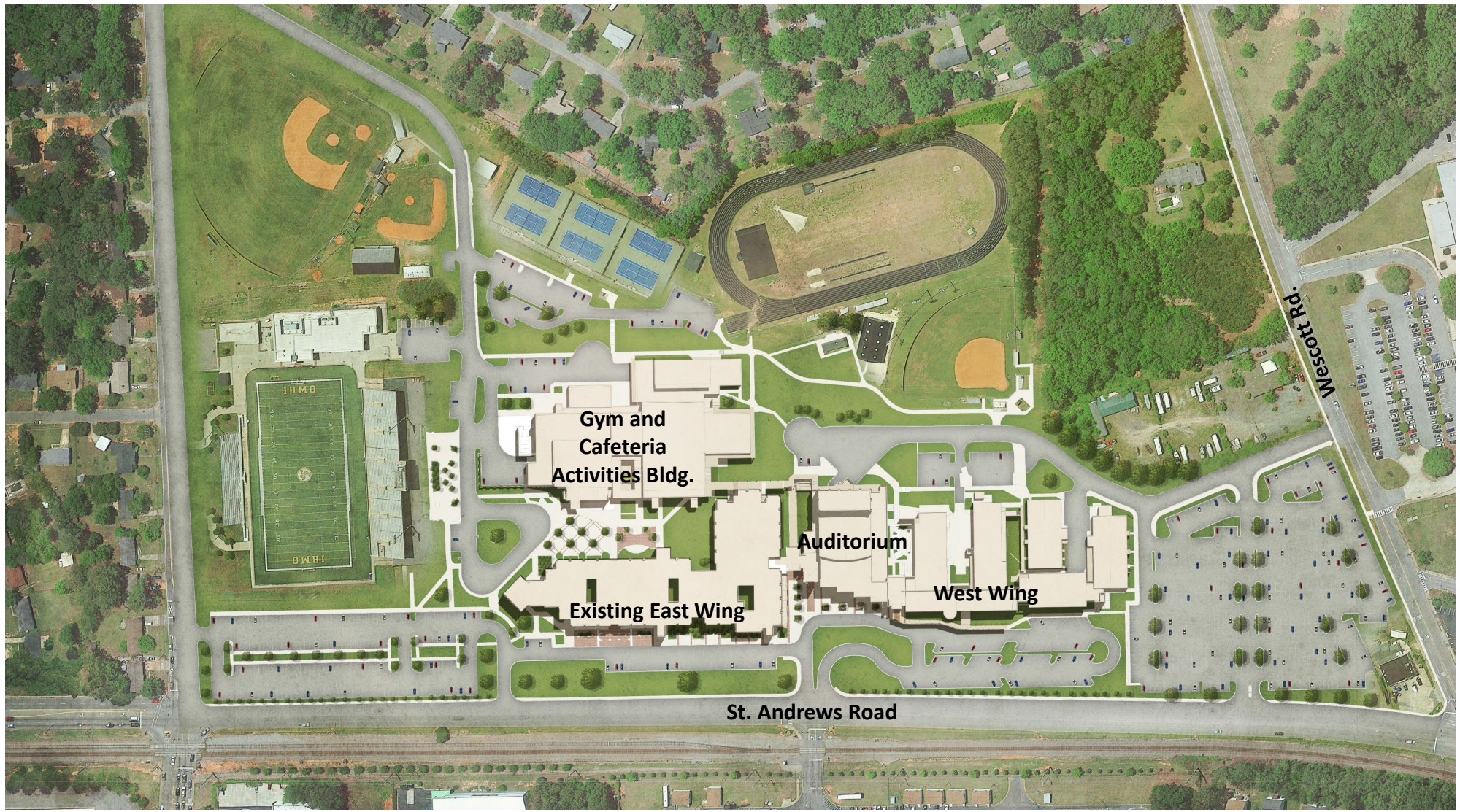
*** Actual "Soft" Costs TBD by the District – these are just estimates based on "typical" soft costs for similar projects.**

SCHEMATIC DESIGN COST ESTIMATE

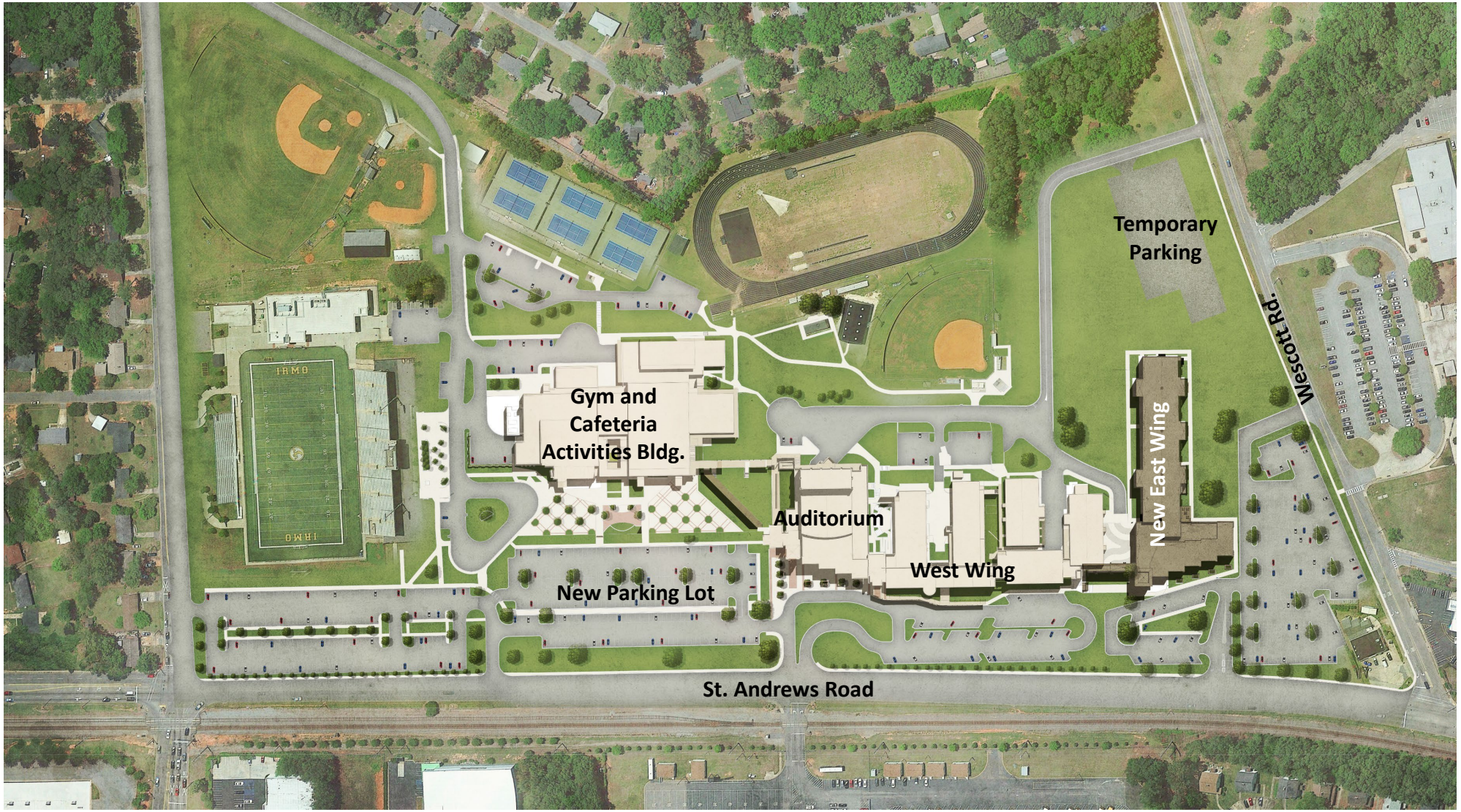
Irmo HS Wing Replacement	Notes	Costs		Totals	Notes
Description		GSF	$/GSF		
ESTIMATED CONSTRUCTION "HARD" COSTS					
Site					
Sitework & Utilities for new East Wing Location		120,000	$39	$4,651,337	Stormwater; retaining walls, parking demo, science labs, etc.
Building					
New East Wing Building		120,000	$393	$47,154,469	
ESTIMATED TOTAL CONSTUCTION COSTS *			$432	$51,805,806	Note: Includes 15% Design and Estimating Contingency. Does NOT include demo of East Wing and construction of new parking lot.
ESTIMATED "SOFT" COSTS (That are in addition to the Construction Cost)					
Typical "Soft Costs" (Actuals costs to be determined by District)	20%			$10,361,161	Fees, surveys, inspections, furniture, technology, etc. Includes a 5% Owner's Project Contingency
ESTIMATED TOTAL PROJECT COSTS (Construction Cost + Soft Costs)				$62,166,967	

*Note: *This Construction Cost Estimate is a summary based on Aiken Cost Consultants' estimate of the Schematic Design of Irmo HS East Wing Replacement. Escalation has been updated for a September 2024 mid-point of construction.*

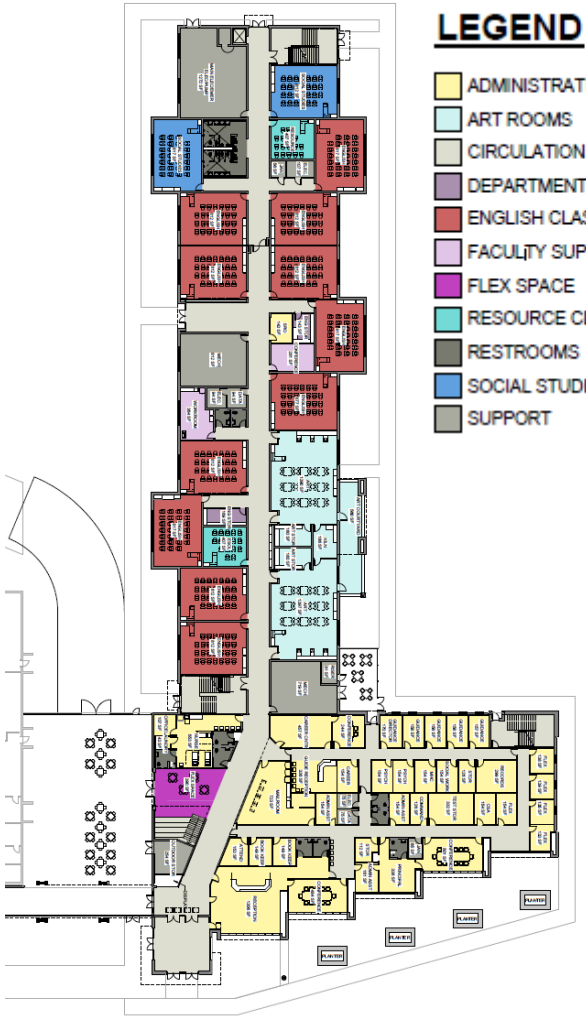
EXISTING SITE PLAN



SCHEMATIC DESIGN SITE PLAN



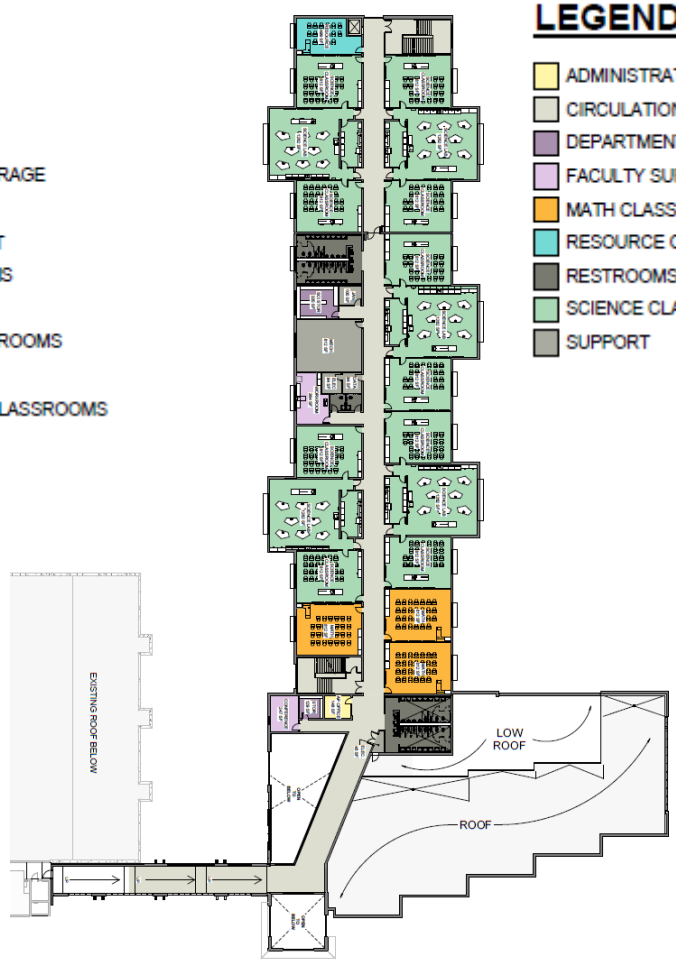
FLOOR PLANS – SCHEMATIC DESIGN



FIRST FLOOR



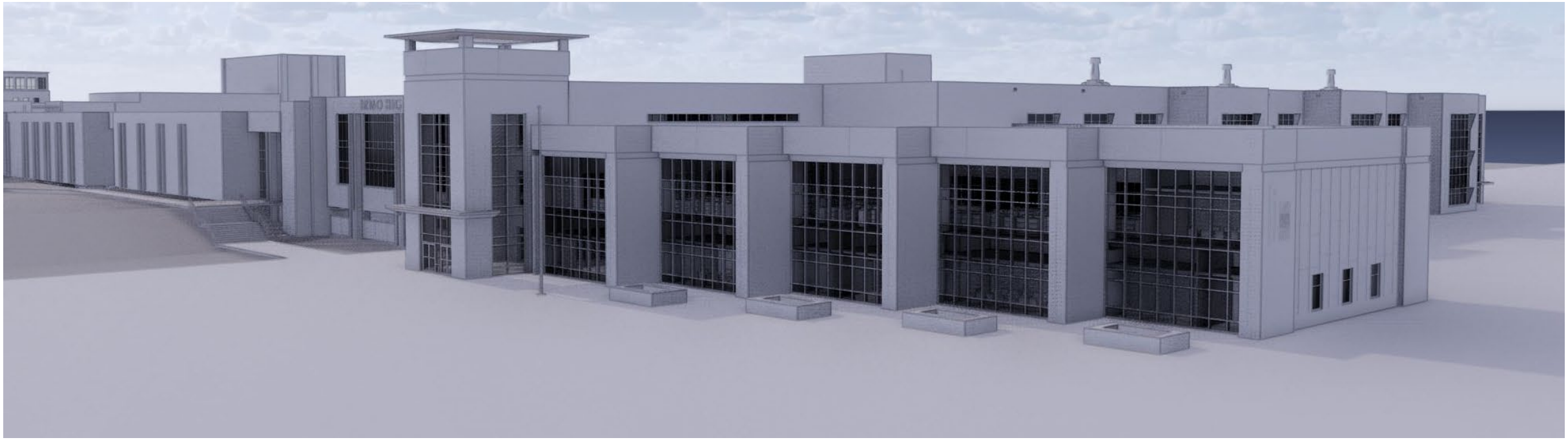
SECOND FLOOR



THIRD FLOOR

SCHEMATIC DESIGN - BUILDING ELEVATION





ST. ANDREWS ROAD VIEW OF ENTRY



EXTERIOR MASSING COURTYARD





INTERIOR MASSING STAIR-A-TORIUM



INTERIOR MASSING MEDIA CENTER





PROJECT SCHEDULE UPDATE

IRMO HIGH SCHOOL EAST WING REPLACEMENT
PROJECT SCHEDULE UPDATE

February 7, 2023

