SOUTH SHORE Technical High School

Hanover, Massachusetts



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School Building Committee

November 2, 2023



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Agenda

1. Public Comment

- 2. Project Approvals:
 - Meeting Minutes from October 24, 2023 SBC Meeting
 - Invoices LeftField and DRA Architects
- 2. Budget Update
- 3. Schedule Update
- 4. Designer Options:
 - Review Comparative Conceptual Cost Analysis
 - Review Options Priority Matrix
 - Possible Vote to eliminate a number of design options and/or design enrollments from consideration
- 5. Adjourn



Invoices - TOTAL \$368,610.43



INVOICES						
ProPay Code	Invoice Date	Vendor	Invoice #	Budget Category	Description of Services	Invoice \$
0001-0000	09/30/23	LeftField, LLC	6	OPM – Feasibility Study/ Schematic Design	OPM Feasibility Study Services September 1 – September 30, 2023	\$29,000.00
0001-0000	10/31/23	LeftField, LLC	7	OPM – Feasibility Study/ Schematic Design	OPM Feasibility Study Services October 1 – October 31, 2023	\$29,000.00
0002-0000	09/30/23	DRA	3	A/E - Feasibility Study/ Schematic Design	A/E Feasibility Study Services September 1 – September 30, 2023	\$82,500.00
0002-0000	10/31/23	DRA	4	A/E - Feasibility Study/ Schematic Design	A/E Feasibility Study Services October 1 – October 31, 2023	\$220,000.00
0002-0000	10/31/23	DRA	A1-1	A/E - Feasibility Study/ Schematic Design	Amendment #1 - Preliminary Geotech Study, ESA Phase 1	\$4,288.79
0002-0000	10/31/23	DRA	A2-1	A/E - Feasibility Study/ Schematic Design	Amendment #2 – Hazmat Investigation, Report, Estimate	\$3,821.64
					TOTAL:	\$368,610.43



Total Project Budget Update



roPay Code	Description	Total Project Budg	et Authorized Change	s Rev	vised Total Budget	Total Committed	% Cmtd to Date	Actual Spent to Date	% Spent to Date	Balance To Spend	Comments
ſ	FEASIBILITY STUDY AGREEMENT										
0001-0000	OPM Feasibility Study/Schematic Design	\$ 400,0	00	\$	400,000	\$ 400,000	100%	\$ 169,000	42%	\$ 231,000	
0002-0000	A&E Feasibility Study/Schematic Design	\$ 1,100,0		\$	1,100,000	1,059,950	96%		34%	\$ 730,568	
0003-0000	Environmental & Site	\$ 300,0	and the second	\$	300,000	÷ -	0%		0%	\$ 300,000	
0004-0000	Other	\$ 200,0		\$	200,000		0%	/	0%	\$ 200,000	
	SUB-TOTAL	\$ 2,000,0	00 \$	- \$	2,000,000	\$ 1,459,950	73%	\$ 538,432	27%	\$ 1,461,568	_
											_
Γ	TOTAL PROJECT BUDGET	\$ 2,000,0	00 \$	- \$	2,000,000	\$ 1,459,950	73%	\$ 538,432	27%	\$ 1,461,568	
					2,000,000	\$ 1,459,950	73%	\$ 538,432	27%	\$ 1,461,568	
	TOTAL PROJECT BUDGET FUNDING SOURCES Maximum State Share	\$ 2,000,0 Max w/ Conting. \$ 1,112,6	Max w/o Conting.		Project	\$ 1,459,950	73%	\$ 538,432 Basis of Total	27% Reimbursement	\$ 1,461,568	

Committed: 73% Expended: 27%

- All Contract Amendments have been committed against the original budget to indicate the remaining funds in each Budget Category
- All Invoices have been indicated in the Budget

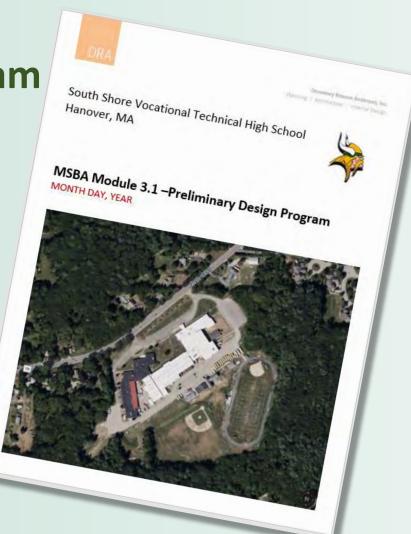


Status Updates



MSBA Submission: Preliminary Design Program

- 1. Education Program
- 2. Existing Conditions Assessment
- 3. Site Development Requirements
- 4. Preliminary Options





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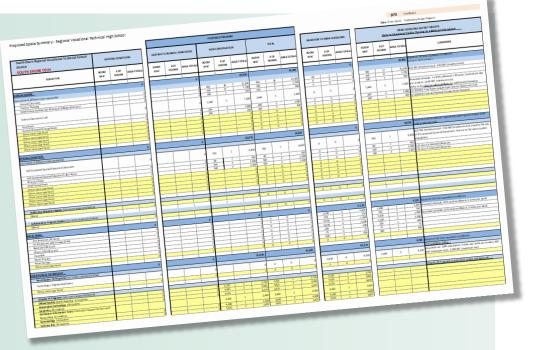
Enrollment Options

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Quantitative Program Space Summaries

- **645** Students = 203,480 GSF (CTE:65,000 sf)
- **750** Students = 228,540 GSF (CTE:74,000 sf)
- 805 Students = 240,000 GSF (CTE:77,000 sf)
- **900** Students = 260,000 GSF (CTE:87,000 sf)
- **975** Students = 278,000 GSF (CTE:93,000 sf)

Existing Building = 125,000 sf





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Preliminary Options - Areas



Option	645 students	750 students	805 students	900 students	975 students
Addition/ Renovation AR-1 "L-shape"	201,500 sf	217,500 sf	230,400 sf	243,200 sf	254,500 sf
Addition/ Renovation AR- 2 "Lightwell"	188,100 sf	201,700 sf	209,600 sf	228,500 sf	236,100 sf
New Construction NC-1 "Courtyard"	203,480 sf	228,540 sf	240,000 sf	260,000 sf	278,000 sf
New Construction NC-2 "Linear"	203,480 sf	228,540 sf	240,000 sf	260,000 sf	278,000 sf
New Construction NC-3 "Wings"	203,480 sf	228,540 sf	240,000 sf	260,000 sf	278,000 sf





Status Updates

SOUTH SHORE

Site Development Requirements

Key issues

- Vehicular Circulation, Bus & Car Access
- Parking requirements
- Athletic Fields & support spaces
- Outdoor Learning opportunities
- Utilities
- Outbuildings
- Adjacent Property

Enrollments:	existing 645	750	805	900	975
Staff: (Admin & Teachers):	130	150	160	175	185
Approx. 2/3 of seniors:	108	125	134	150	163
Approx. 1/3 of juniors:	53	61	66	74	80
Visitors:	20	23	24	27	29
TOTAL Parking Spaces:	311	359	384	426	457



Status Updates

Preliminary Options

- Base Repair
- Renovation
- Addition/ Renovation
- New Construction



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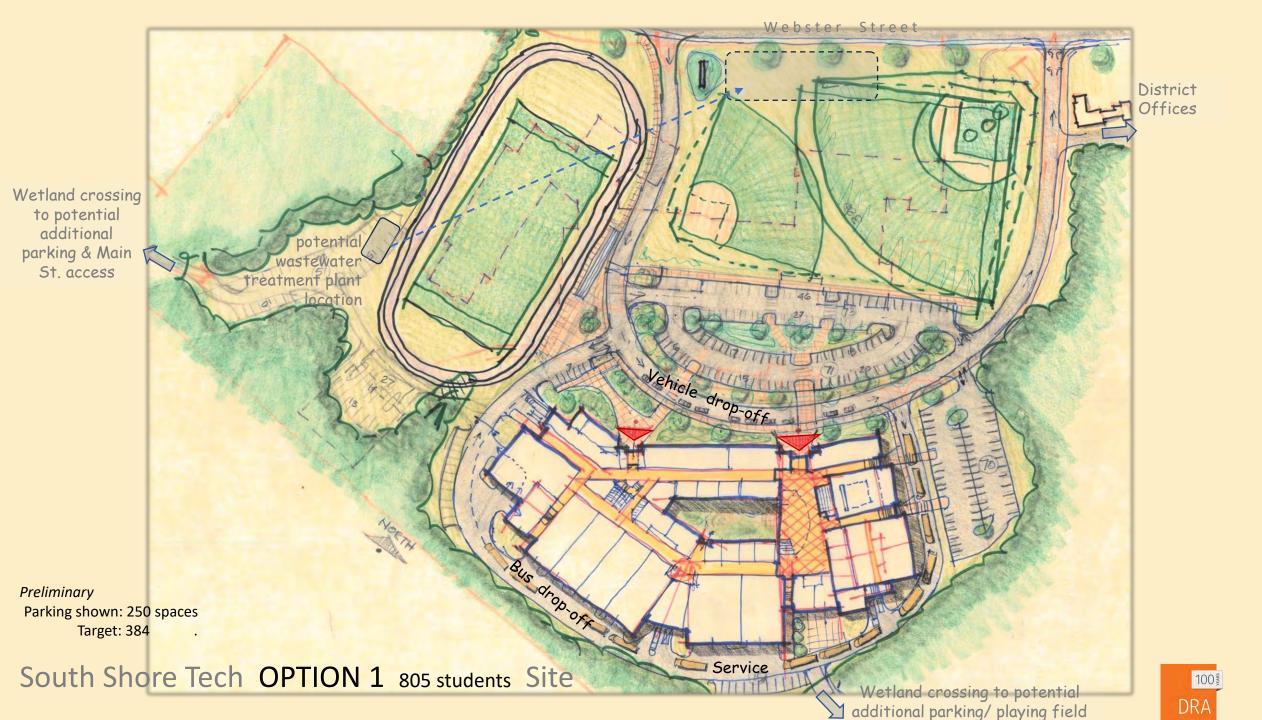
Preliminary Options

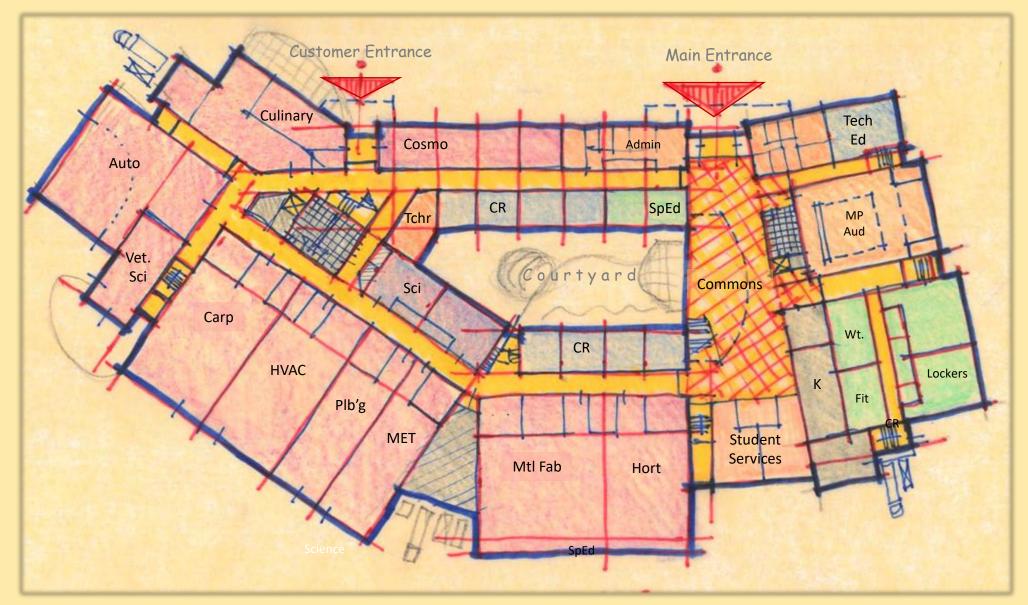


New Construction Options

- 1. "Courtyard"
- 2. "Linear"
- 3. "Wings"

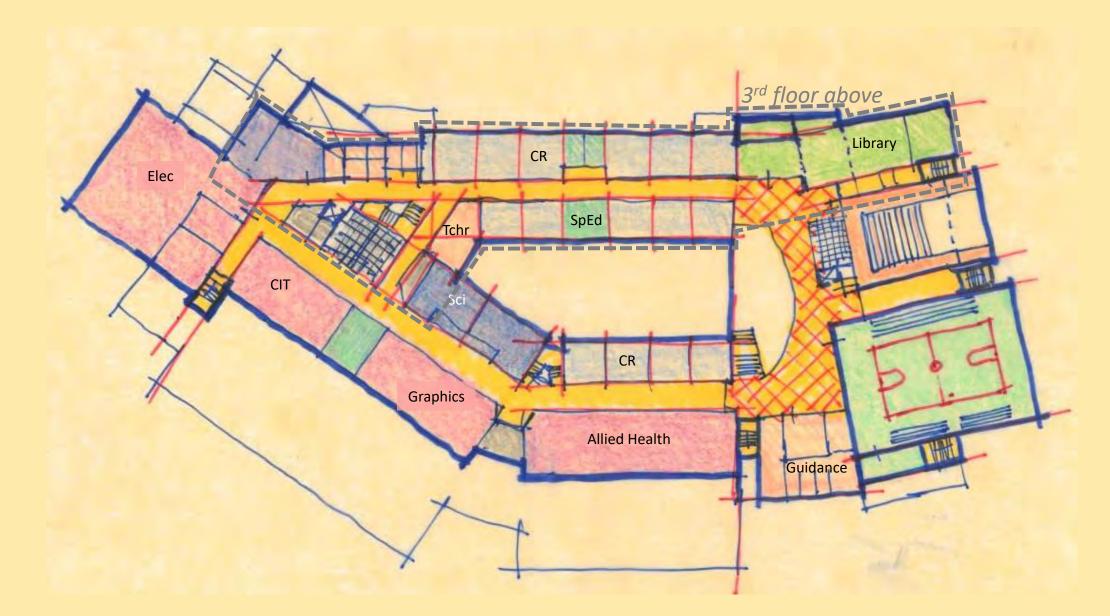






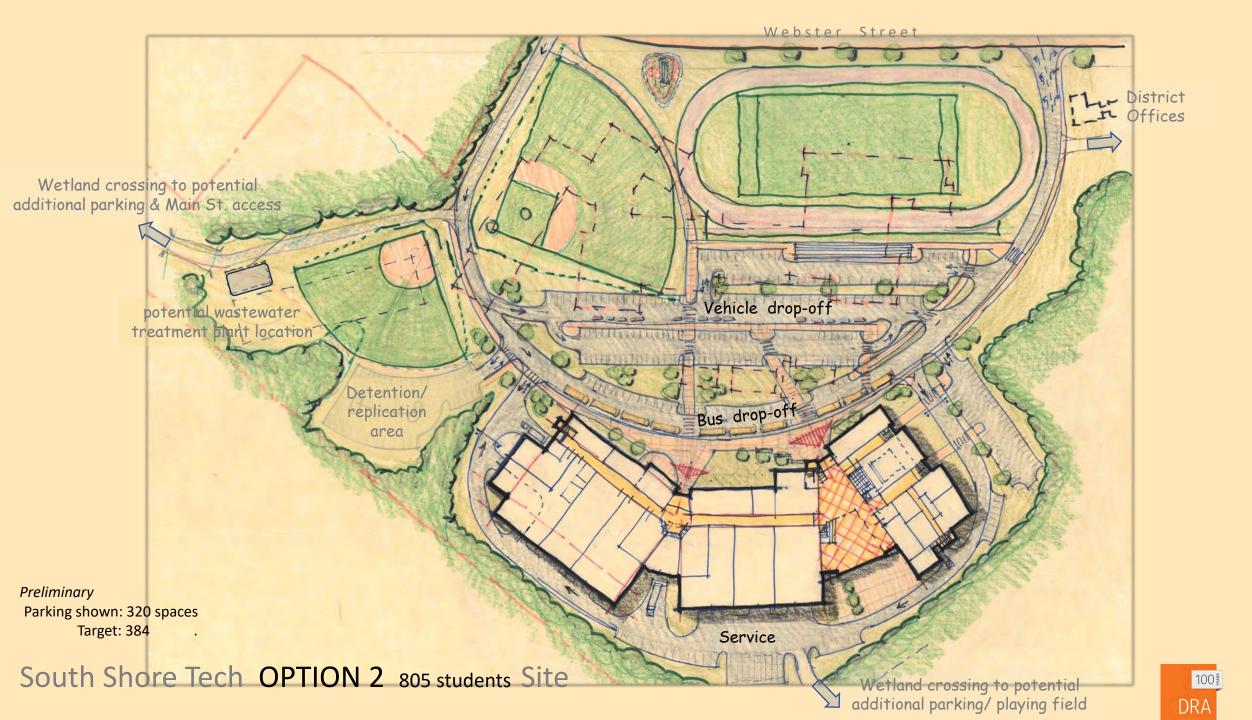
South Shore Tech OPTION 1 1st Floor

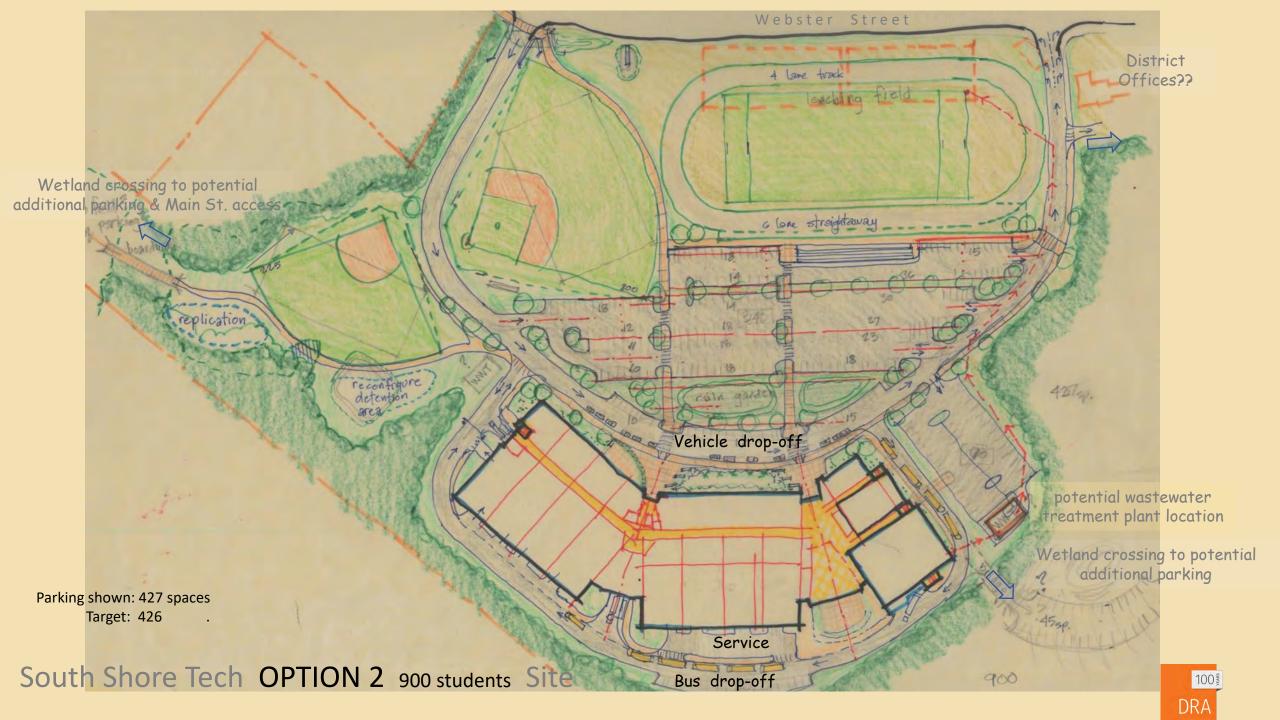


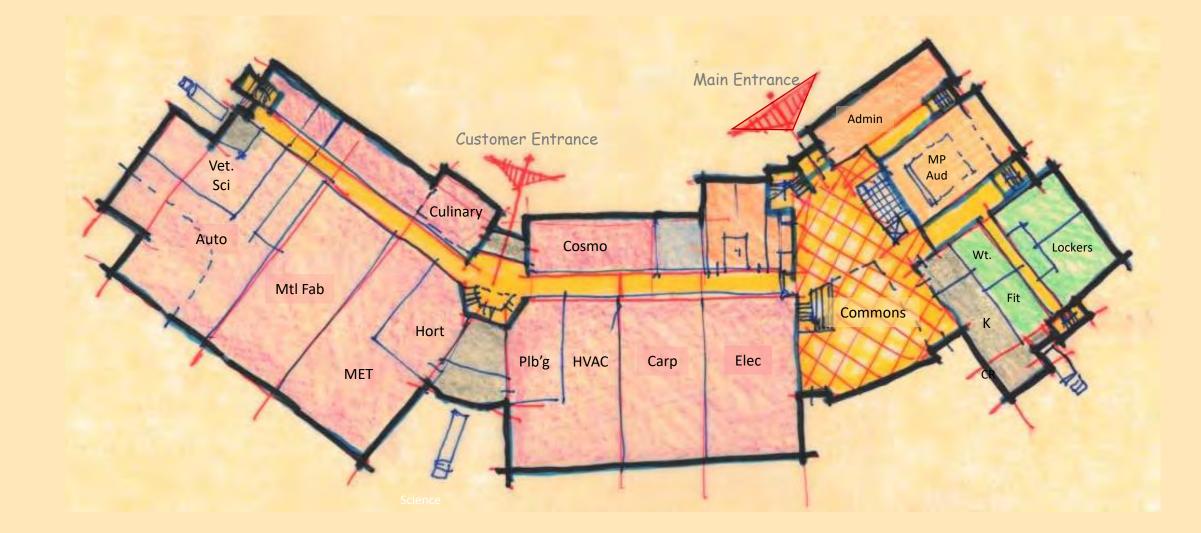


South Shore Tech OPTION 1 2nd Floor

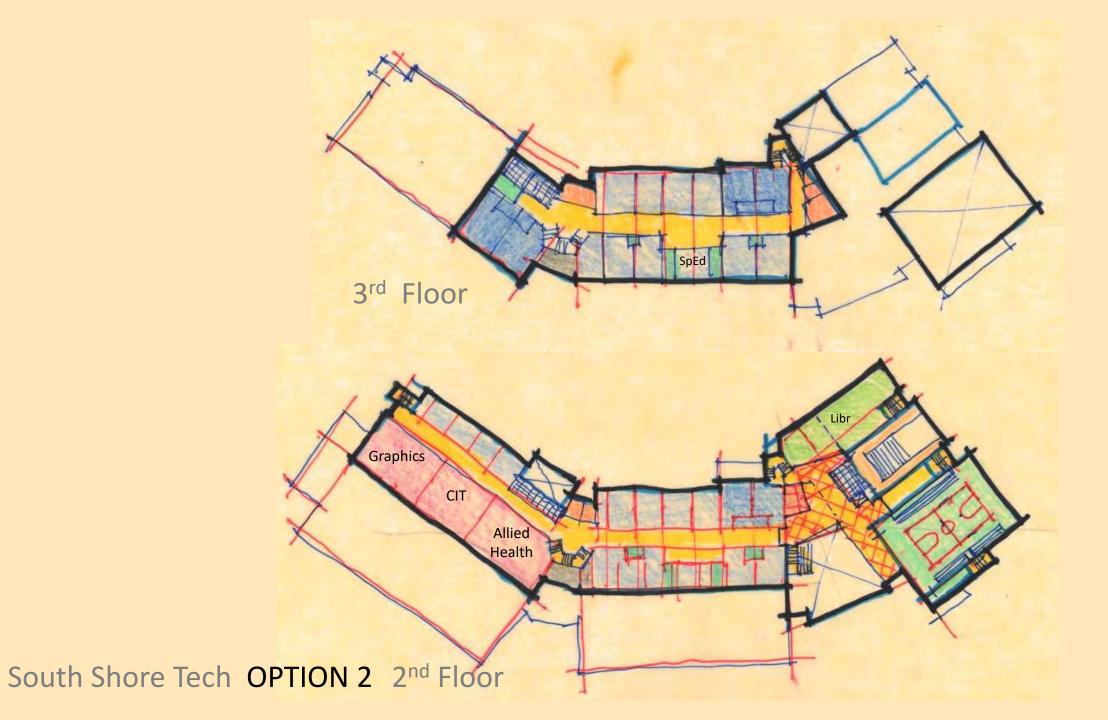




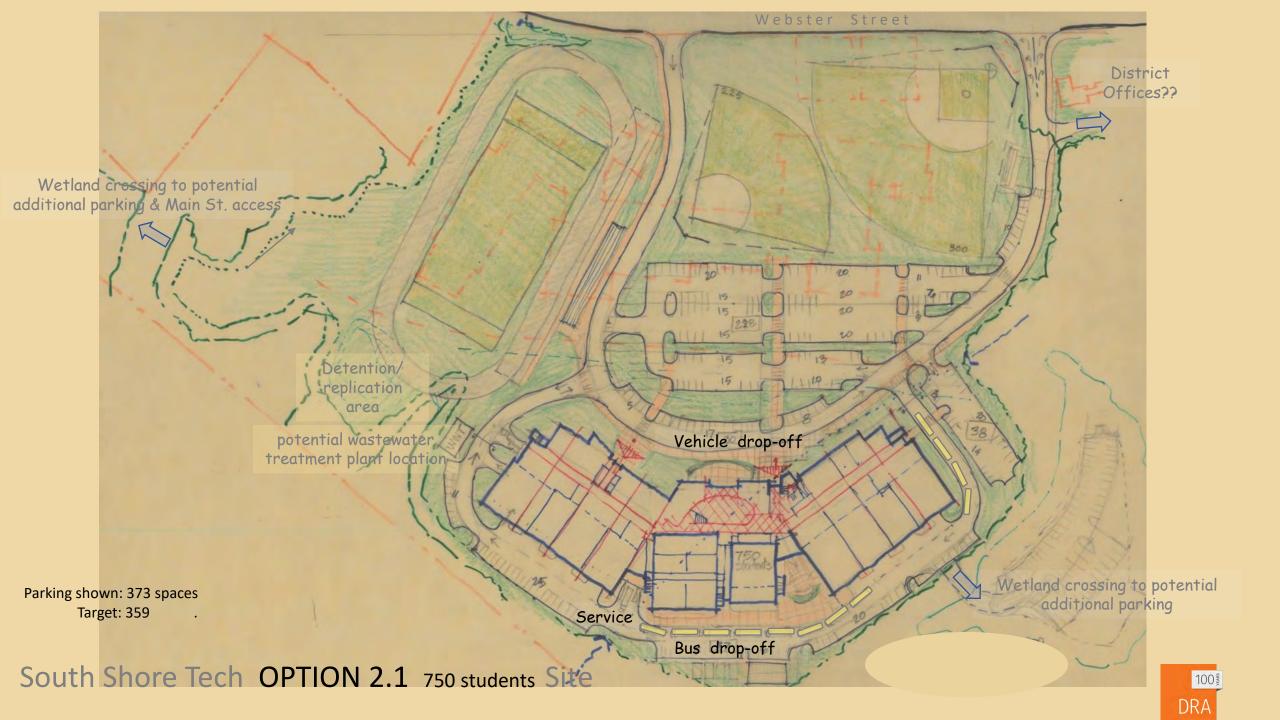


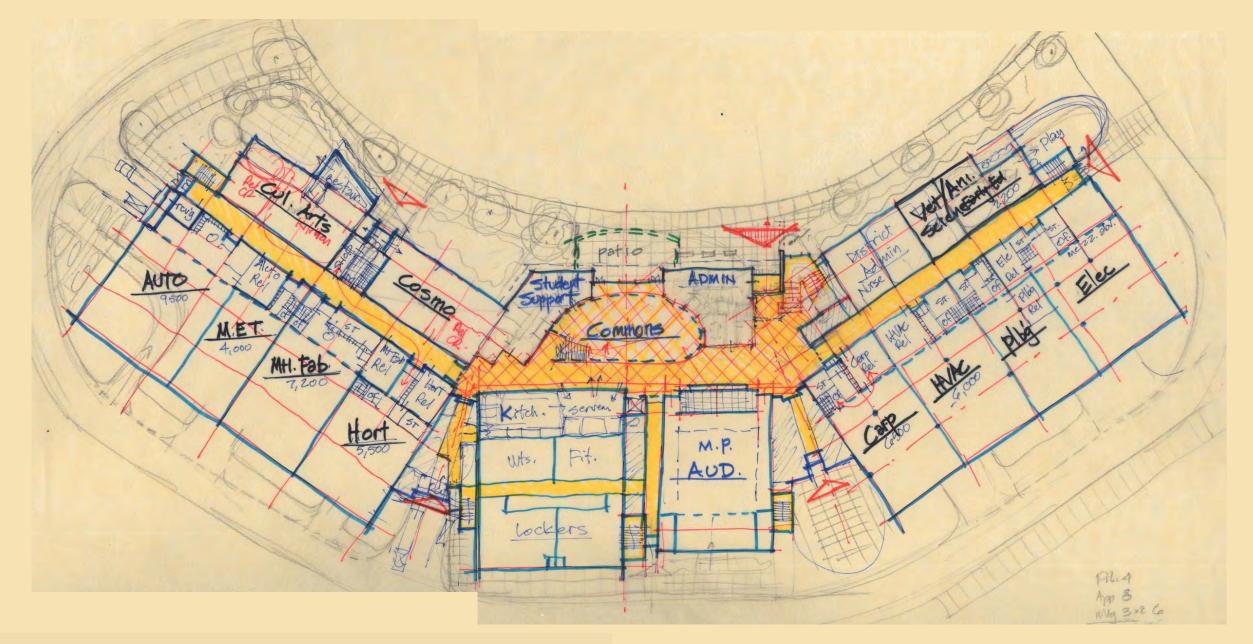


South Shore Tech OPTION 2 1st Floor



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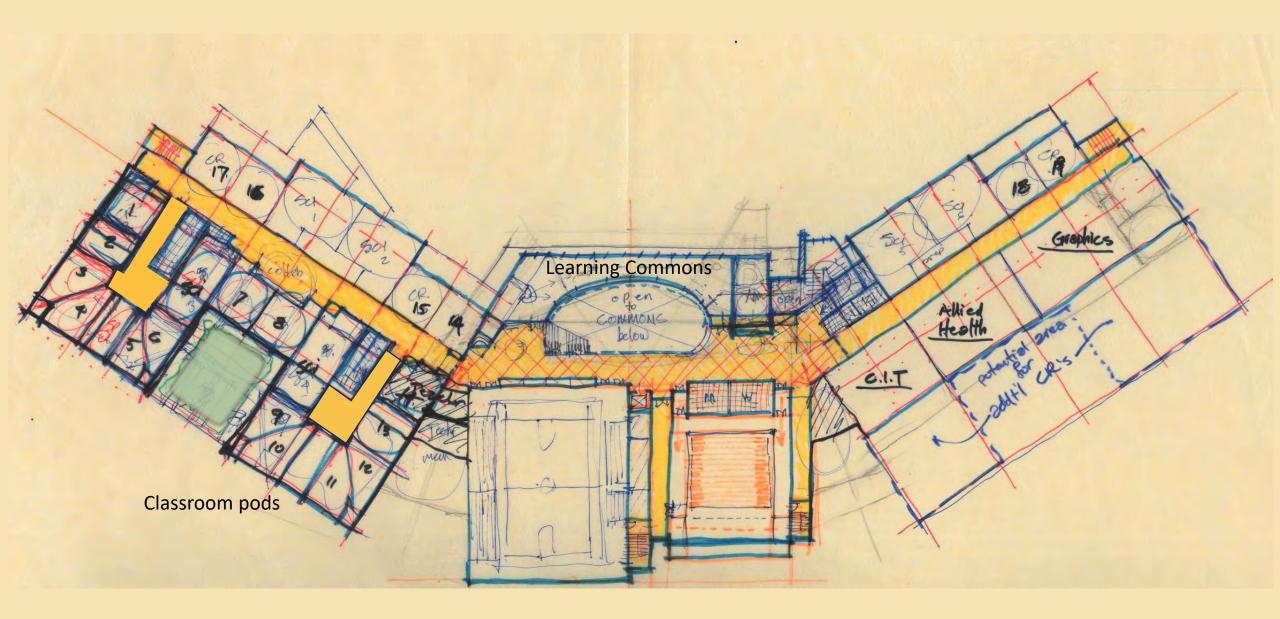




South Shore Tech OPTION 2.1

1st Floor



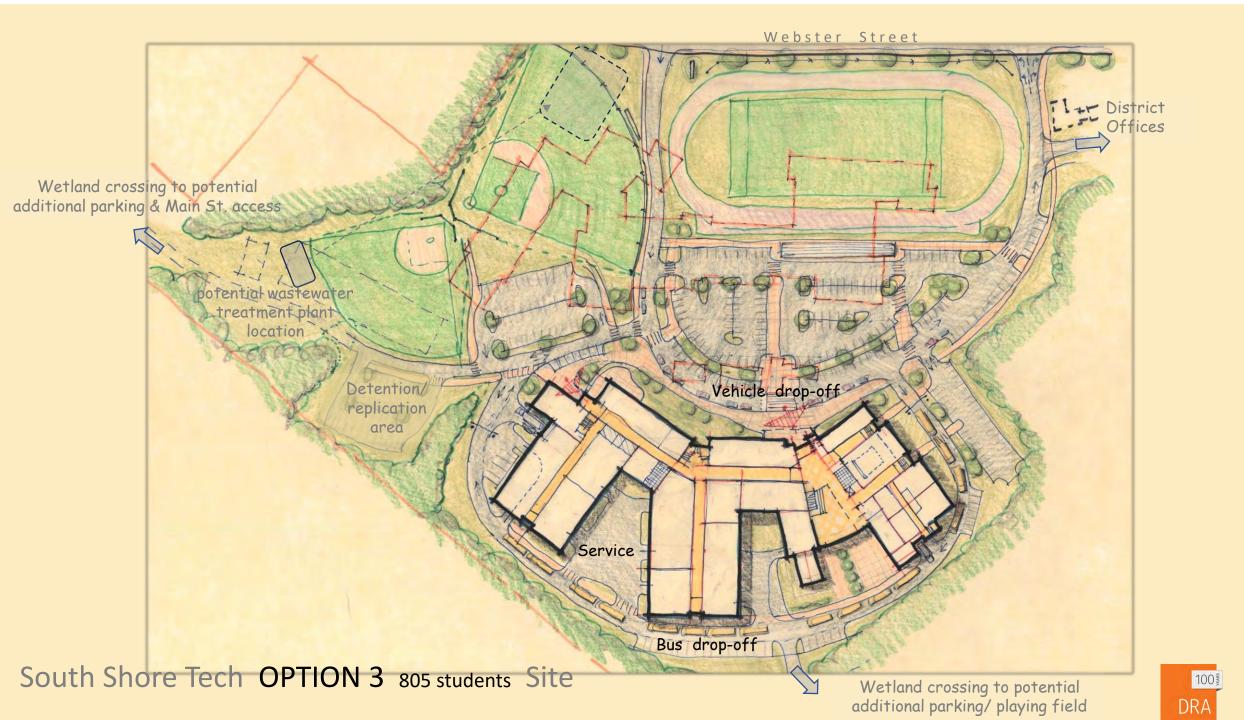


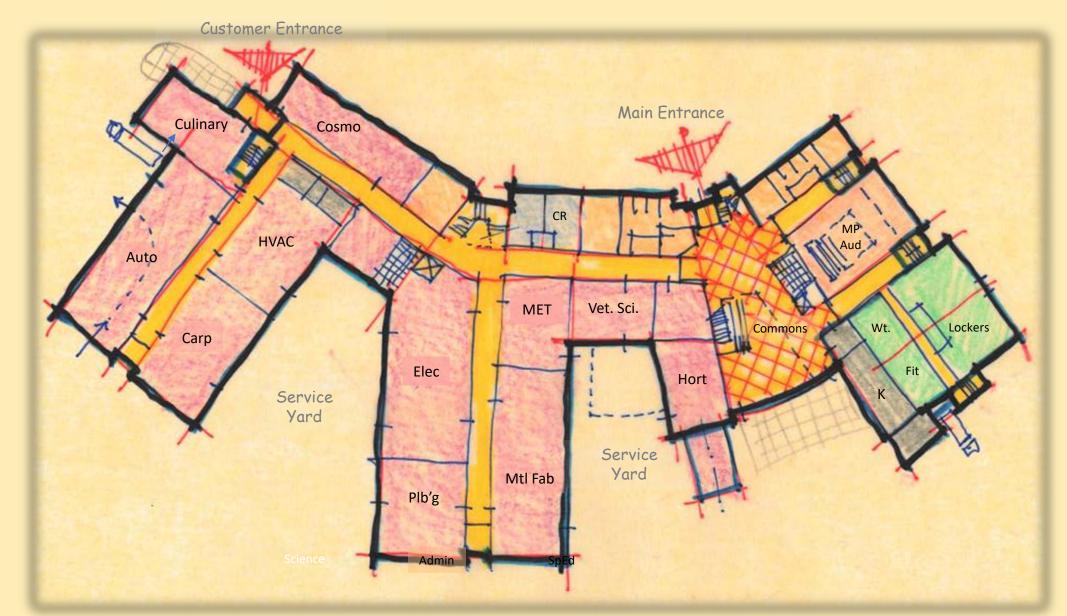
South Shore Tech OPTION 2.1

2nd Floor

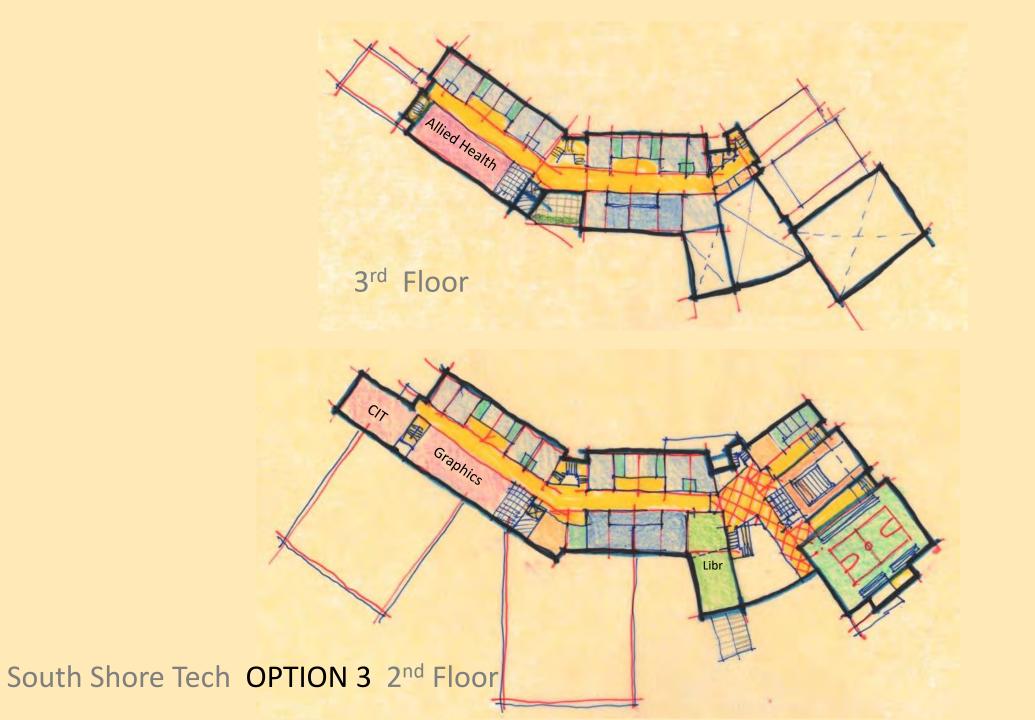




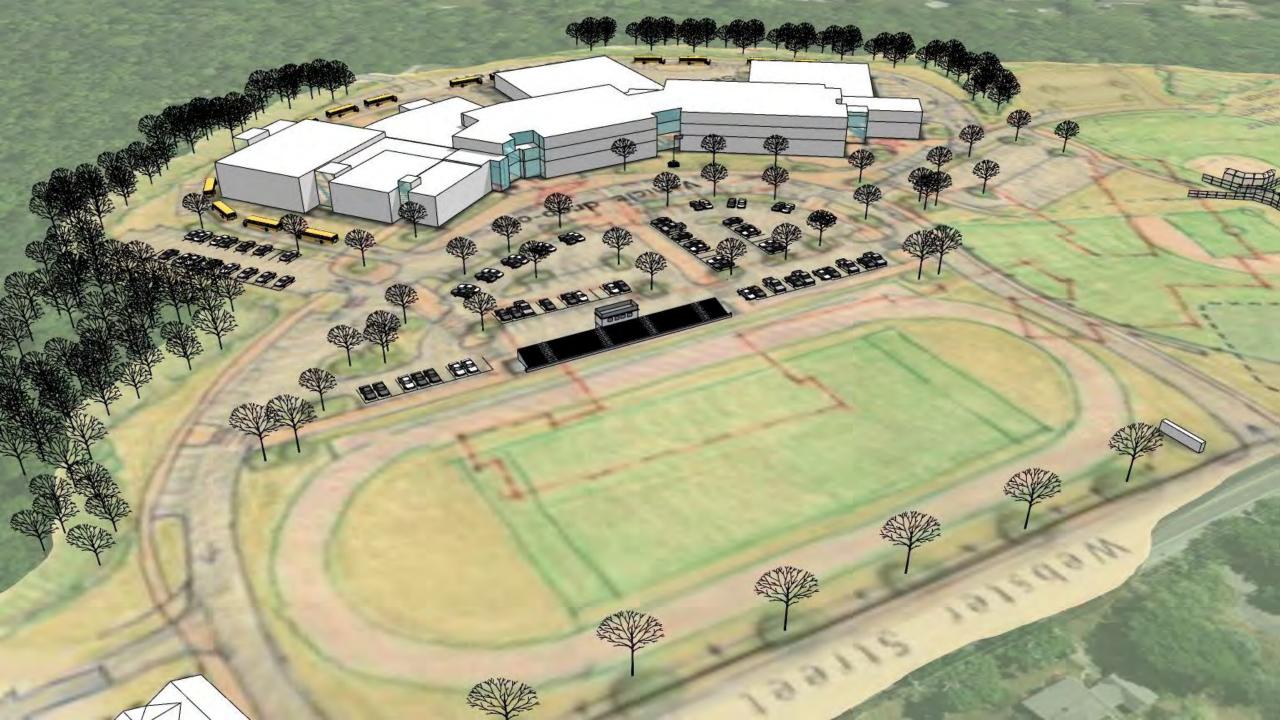




South Shore Tech OPTION 3 1st Floor











Addition / Renovation Options

1. L-Shaped

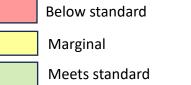
2. Courtyard



Existing Conditions



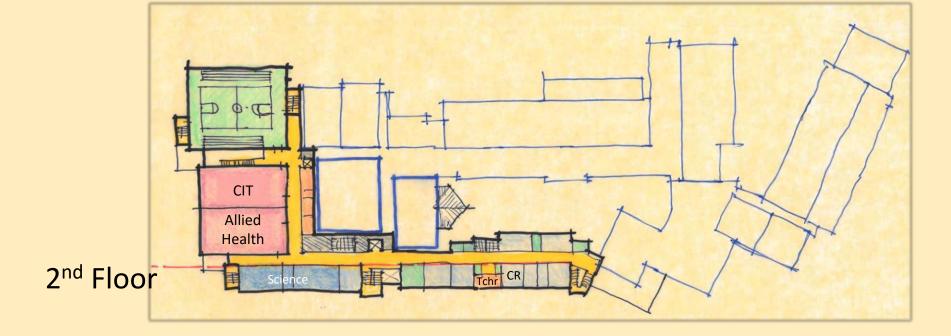


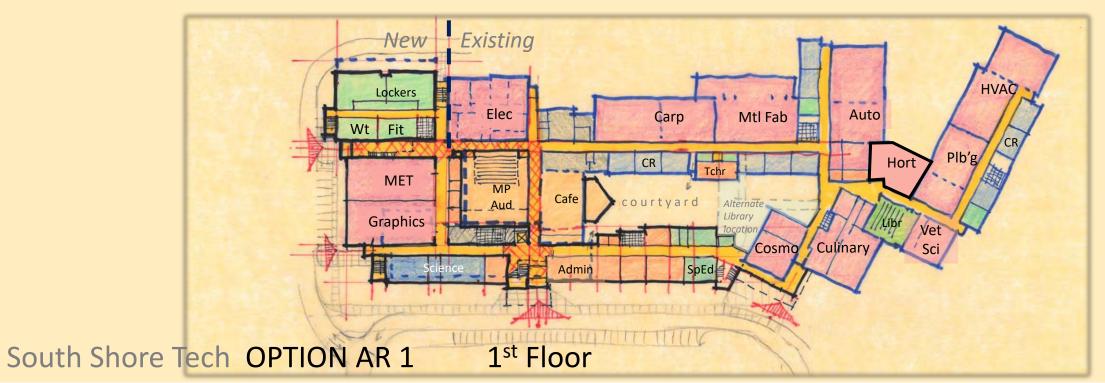








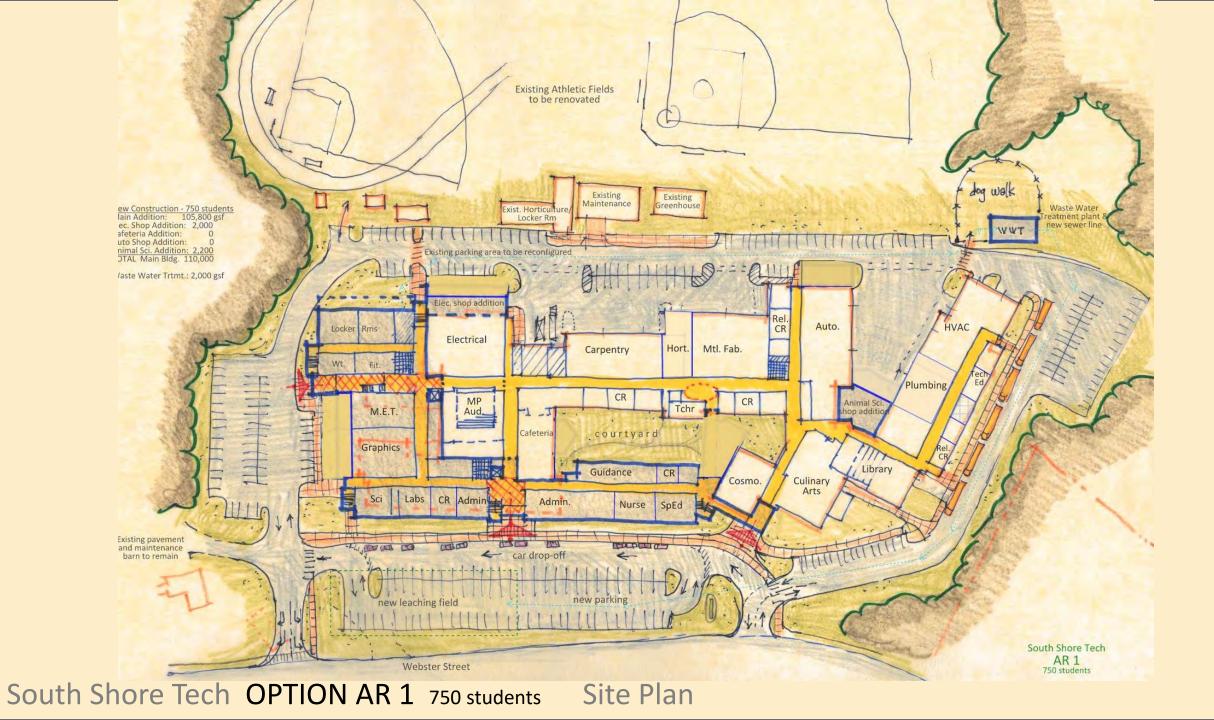


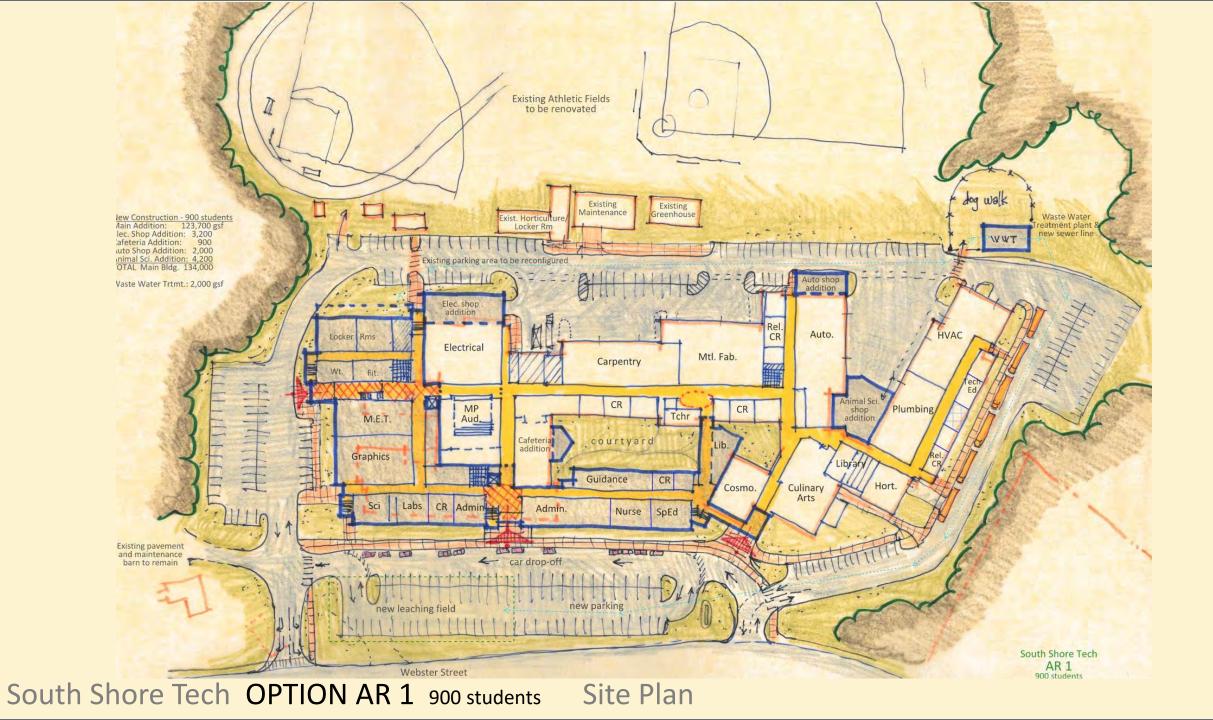


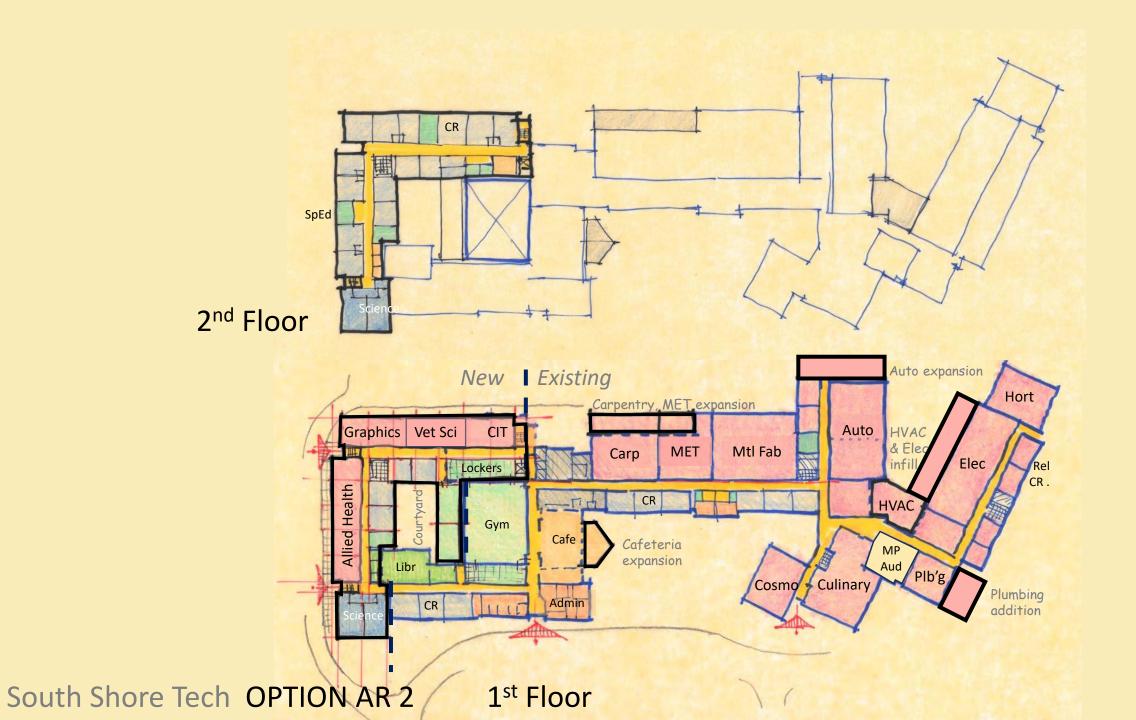
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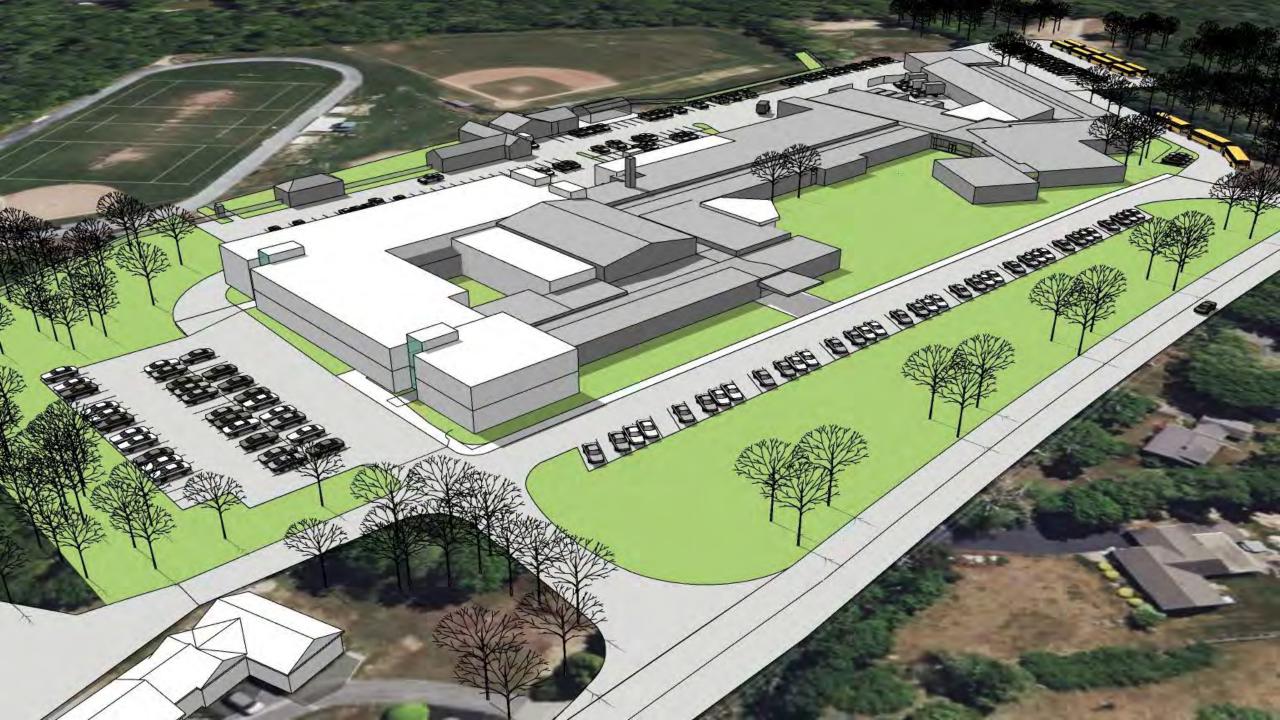
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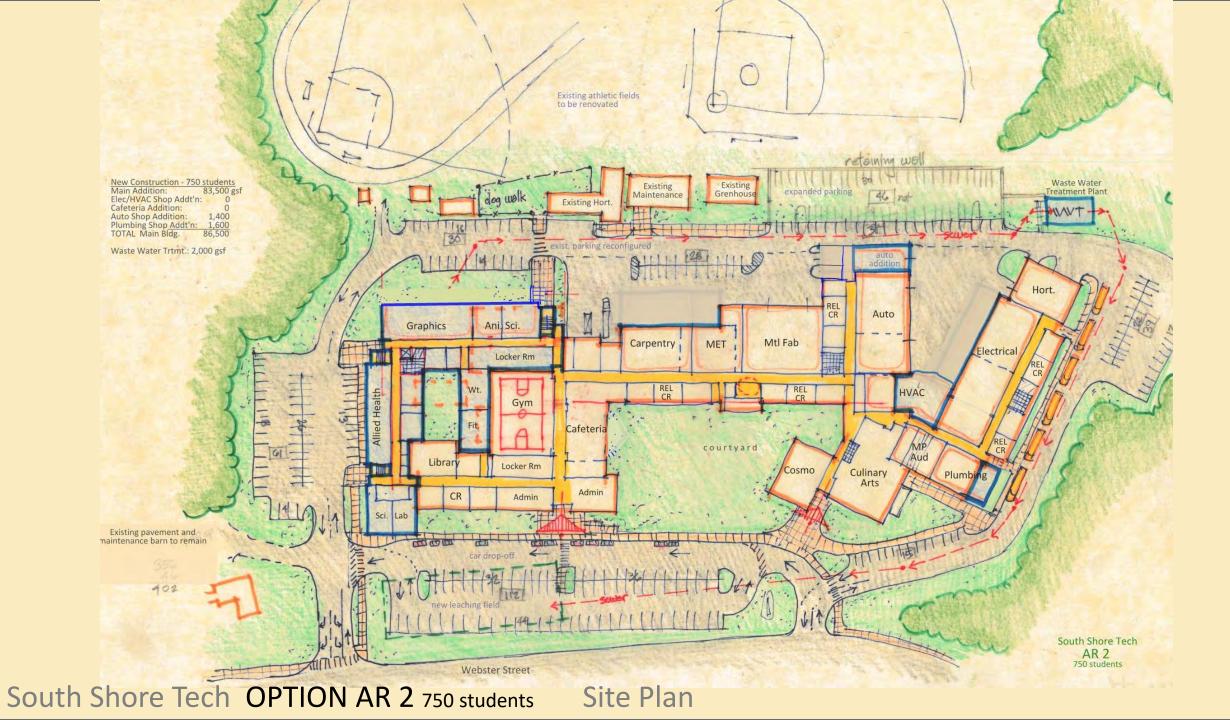


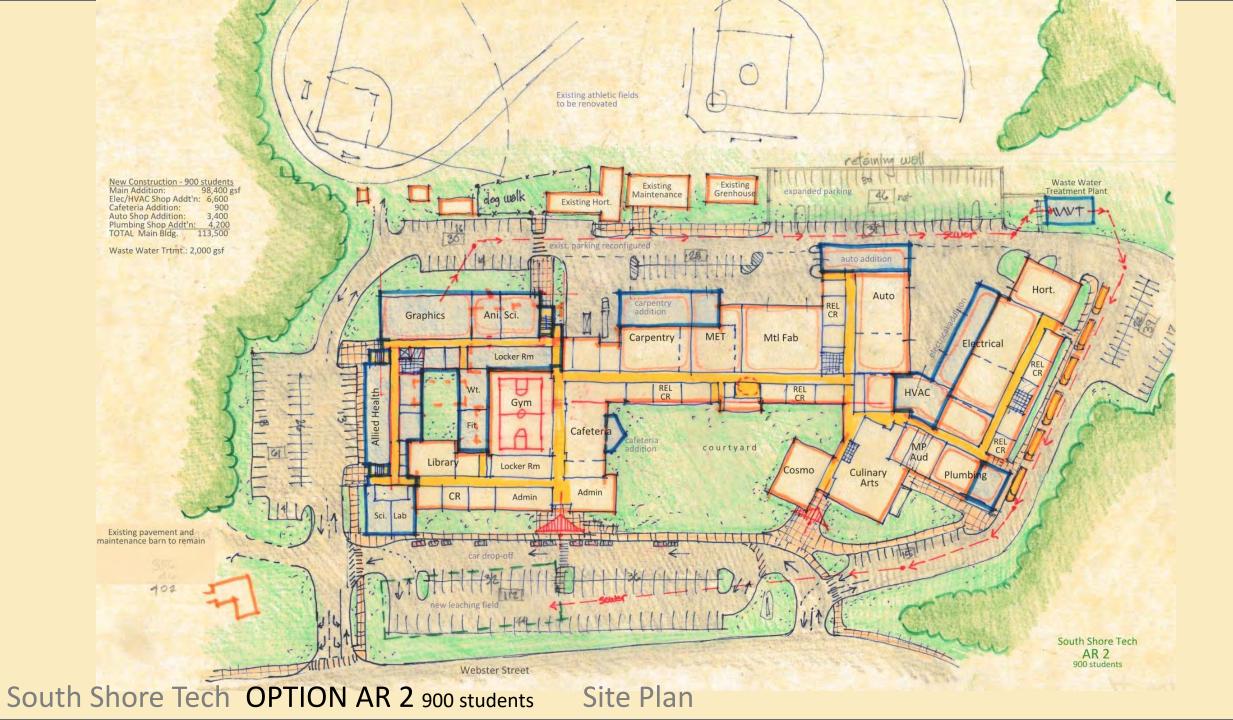












Preliminary Options – Construction Costs



			64	45 Students			750 Students					
Student Enrollment Range: 645 - 975 Students		New* (all 3 options)		Add/Reno AR1 L Shape		Add Reno AR2 Lightwell		New* (all 3 options)		Add/Reno AR1 L Shape		Add Reno AR2 Lightwell
TOTAL DIRECT COSTS	\$	140,095,980	\$	122,836,000	\$	114,940,000	\$	157,349,790	\$	135,168,000	\$	125,993,000
Contingencies, General Requirments, General Conditions, Insurance, Bonds, CM Fee	\$	54,109,800	\$	57,169,900	\$	52,820,700	\$	60,773,900	\$	62,714,600	\$	57,788,300
Modular Classrooms	\$	-	\$	9,350,000	\$	5,500,000	\$	-	\$	9,350,000	\$	5,500,000
Phasing / Scheduling Premium	\$	-	\$	1,960,000	\$	1,800,000	\$	-	\$	2,150,000	\$	1,960,000
Escalation	\$	40,784,000	\$	51,656,000	\$	47,267,000	\$	45,806,000	\$	56,534,000	\$	51,636,000
TOTAL ESTIMATED CONSTRUCTION COSTS	\$	234,989,780	\$	242,971,900	\$	222,327,700	\$	263,929,690	\$	265,916,600	\$	242,877,300
Soft Costs Calculated at 25%	\$	58,747,445	\$	60,742,975	\$	55,581,925	\$	65,982,423	\$	66,479,150	\$	60,719,325
TOTAL ESTIMATED PROJECT COSTS	\$	293,737,225	\$	303,714,875	\$	277,909,625	\$	329,912,113	\$	332,395,750	\$	303,596,625

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Preliminary Schematic Report (PSR) phase to assist the committee in defining the single preferred solution to proceed into the Schematic Design (SD) phase. The actual costs and total project budget will be established at the end of the

Schematic Design (SD) phase for the district's preferred solution.

*Costs are the same across all New Construction Options for each enrollment - shown as a single cost for simplicity.

**Costs based on CM at Risk delivery method to simplify comparison



Preliminary Options – Construction Costs



		805 Students			900 Students	
Student Enrollment Range: 645 - 975 Students TOTAL DIRECT COSTS	New* (all 3 options) \$ 164,160,000	Add/Reno AR1 L Shape \$ 142,658,000	Add Reno AR2 Lightwell \$ 130,559,000	New* (all 3 options) \$ 175,474,000	Add/Reno AR1 L Shape \$ 149,949,000	Add Reno AR2 Lightwell \$ 141,157,000
Contingencies, General Requirments, General Conditions, Insurance, Bonds, CM Fee	\$ 63,403,600	\$ 66,081,000	\$ 59,842,100	\$ 67,773,900	\$ 69,359,500	\$ 64,607,000
Modular Classrooms	\$-	\$ 9,350,000	\$ 5,500,000	\$-	\$ 9,350,000	\$ 5,500,000
Phasing / Scheduling Premium	\$-	\$ 2,260,000	\$ 2,030,000	\$-	\$ 2,370,000	\$ 2,190,000
Escalation	\$ 47,789,000	\$ 59,495,000	\$ 53,442,000	\$ 51,083,000	\$ 62,378,000	\$ 57,633,000
TOTAL ESTIMATED CONSTRUCTION COSTS	\$ 275,352,600	\$ 279,844,000	\$ 251,373,100	\$ 294,330,900	\$ 293,406,500	\$ 271,087,000
Soft Costs Calculated at 25%	\$ 68,838,150	\$ 69,961,000	\$ 62,843,275	\$ 73,582,725	\$ 73,351,625	\$ 67,771,750
TOTAL ESTIMATED PROJECT COSTS	\$ 344,190,750	\$ 349,805,000	\$ 314,216,375	\$ 367,913,625	\$ 366,758,125	\$ 338,858,750

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**Costs based on CM at Risk delivery method to simplify comparison



Preliminary Options – Construction Costs



		975 Students	
Student Enrollment Range: 645 - 975 Students	New* (all 3 options)	Add/Reno AR1 L Shape	Add Reno AR2 Lightwell
TOTAL DIRECT COSTS	\$ 185,592,800	\$ 157,224,000	\$ 145,672,000
Contingencies, General Requirments, General Conditions, Insurance, Bonds, CM Fee	\$ 71,787,800	\$ 73,431,000	\$ 66,637,200
Modular Classrooms	\$ -	\$ 13,200,000	\$ 5,500,000
Phasing / Scheduling Premium	\$-	\$ 2,530,000	\$ 2,260,000
Escalation	\$ 54,109,000	\$ 66,524,000	\$ 59,419,000
TOTAL ESTIMATED CONSTRUCTION COSTS	\$ 311,489,600	\$ 312,909,000	\$ 279,488,200
Soft Costs Calculated at 25%	\$ 77,872,400	\$ 78,227,250	\$ 69,872,050
TOTAL ESTIMATED PROJECT COSTS	\$ 389,362,000	\$ 391,136,250	\$ 349,360,250

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**Costs based on CM at Risk delivery method to simplify comparison



Preliminary Evaluation Matrix - South Shore Tech - Concept Options - WORKING DRAFT

VOCATIONAL TECHNICAL HIGH SCHOOL

9/14/2023				Concept Option	ns		
	MSBA Required	Renovation	Add/ Ren	o Options		New Construction Options	-
	Base Repair	Renovation	AR.1	AR.2	NC.1	NC.2	NC.3
Evaluation Criteria	Code Renovation		L - Shaped	Lightwell	Courtyard	Linear	Wings
Construction Duration:	multiple years		3+ years	4 years	2+ years	2+ years	2+ years
Ed Plan Accommodation Compliance w/ Vision	doesn't address any educational deficiencies	Not Feasible - Existing Building cannot meet the Space Needs for Target Enrollment	Addresses most Space Needs Lacks meaningful integration of academic & CTE spaces	Addresses some Space Needs Gym & Lecture Hall remain undersized	Good Ed Plan conformance	Good Ed Plan Conformance	Best Ed Plan Conformance
Project Cost Reimbursable Cost			Lower initial cost	Lower initial cost	Higher Initial Construction Cost	Higher Initial Construction Cost	Higher Initial Construction Cost
Temporary Costs			Higher reimbursment rate for renovation	Higher reimbursment rate for renovation	Good Long-Term Value	Good Long-Term Value	Good Long-Term Value
Long-term Value			High temporary costs.	Higher temporary costs Poor long Term Value			
Disruption			Phased construction adjasent to occupancy	Phased construction adjasent to occupancy	Minimal impact on adjasent occupncy. Loss of Athletic Fields during construction.	Minimal impact on adjasent occupncy, Loss of Athletic Fields during construction.	Minimal Impact on adjasent occupncy. Lo Athletic Fields during construction.
Impact on Students Construction Duration			Long construction schedule	Long construction schedule	Short duration	Short duration	Short duration
Phasing			Multi-phase renovation	Multi-phase renovation	2 phases: 1. New construction, 2 Demolition & Sitework	2 phases: 1. New construction, 2 Demolition & Sitework	2 phases: 1. New construction, 2 Demoliti Sitework
			Some Flexibility	Limited flexibility	Good Flexibility,	Good Flexibility,	Good Flexibility,
Flexibility Community Use			Good community use	Limited community use, lack of Auditorium	Good Community access	Good Community access	Good Community access
Expansion Potential			Limited expansion potential	Limited expansion potential	Limited expansion potential	Limited expansion potential	Limited expansion potential
			Generally all new finish materials & systems	Generally all new finish materials & systems	All new construction, infrastructure, & MEP systems	All new construction, infrastructure, & MEP systems	All new construction, infrastructure, & M systems
Operating Costs			Some existing infrastructure remains	Some existing infrastructure remains	Best thermal envelope	Best thermal envelope	Best thermal envelope
Maintenance			Limited Building envelope upgrade	Limited Building envelope upgrade			
	-		Site circulation similar to existing	Site circulation similar to existing	Site Approach focused on School	Site approach along edge of property	Site Approach focused on School
Site Access			Potential admin presence at existing public	Unchanged access to public shops			
Safety & Security Circulation/ Flow			entrance		Dedicated secure access to public shops	Dedicated secure access to public shops	Dedicated secure access to public sho
Circulationy Flow			Remains somewhat sprawling	Remains somewhat sprawling, disjointed	Compact footprint, central student commons	Long linear corridor	Some dead-end corridors
Final Site layout Site			Similar to existing	Similar to existing	Larger footprint in a constrained site	Building layout follows buildable area	Wings create shared outdoor collaboration
amenities Impact to			No additional site amenities	No additional site amenities	Bus access at rear Enclosed outdoor courtyard	Separate Buses and Car drop-offs in front Patio off of the Commons	Bus access at rear off of the Commons
Abutters			Minimal new impact to abutters	Minimal new impact to abutters	Playing fields may impact abutters	Playing fields may impact abutters	Playing fields may impact abutters
					School setback from street	School setback from street	School setback from street
Civic Image / Aesthetics			New "front door" and civic image	Minimal improved image	Athletic fields & parking in front yard	Athletic fields & parking in front yard	Athletic fields & parking in front yar
B- <i>i i</i> - i - - - i - - - i - - - - - - - - - -				Lesss opportunity to transform aesthetics	All new construction = all new image	All new construction = all new image	All new construction = all new image
Totals	+				An new construction = an new image	An new construction = an new image	An new construction - an new image
IUtais							

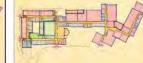


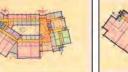


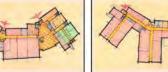
neutral.

negative / least advantageous











Updated:	-			^P =	Construct	tion Duration:	I - Concept Options - WORI		
9/14/2023	MSBA Required	Renovation		11	Ed Plan Accommodation	ption	s	New Construction Options	
	Base Repair	Renovation		: ·	Compliance w/ Vision		NC.1	NC.2	NC.3
Evaluation Criteria	Code Renovation	-	-	-			Courtyard	Linear	Wings
Construction Duration:	multiple years				Project a		2+ years	2+ years	2+ years
Ed Plan Accommodation Compliance w/ Vision	doesn't address any educational deficiencies	Not Feasible - Existing Building cannot meet the Space Needs for Target Enrollment	Lac	2	Project Cost Reimbursable Cost Temporary Costs	d	Good Ed Plan conformance	Good Ed Plan Conformance	Best Ed Plan Conformance:
Project Cost Reimbursable Cost				H	ong-term Value		Higher Initial Construction Cost	Higher Initial Construction Cost	Higher Initial Construction Cost
Temporary Costs Long-term Value				D	isruption	Poor	Good Long-Term Value	Good Long-Term Value	Good Long-Term Value
Disruption Impact on Students				100	npact on Students Instruction Duration asing	upancy	Minimal impact on adjasent occupncy. Loss of Athletic Fields during construction.	Minimal impact on adjasent occupncy. Loss of Athletic Fields during construction.	Minimal Impact on adjasent occupncy. Loss of Athletic Fields during construction.
Construction Duration				1	using	*.	Short duration	Short duration	Short duration
Phasing			\vdash	+			2 phases: 1. New construction, 2 Demolition & Sitework	2 phases: 1. New construction, 2 Demolition & Sitework	2 phases: 1. New construction, 2 Demolition & Sitework
Flexibility			4	Flex	sibility		Good Flexibility,	Good Flexibility,	Good Flexibility,
Community Use			1	Con	munity Use	Auditorium	Good Community access	Good Community access	Good Community access
Expansion Potential				Expa	ansion Potential	ntial	Limited expansion potential	Limited expansion potential	Limited expansion potential
Market Alexander 19			\vdash	-	- Critian	als & systems	All new construction, infrastructure, & MEP	All new construction, infrastructure, & MEP	All new construction, infrastructure, & MEP
Operating Costs Maintenance			5	Oper	ating Costs	e remains e upgrade	systems Best thermal envelope	systems Best thermal envelope	systems Best thermal envelope
				Main	tenance	b existing	Site Approach focused on School	Site approach along edge of property	Site Approach focused on School
Site Access Safety & Security			\vdash			ablic shops	Dedicated secure access to public shops	Dedicated secure access to public shops	Dedicated secure access to public shops
Circulation/ Flow				Sito A.		ling, disjointed	Compact footprint, central student commons	Long linear corridor	Some dead-end corridors
			6	Site Ac	& Security	ting	Larger footprint in a constrained site	Building layout follows buildable area	Wings create shared outdoor collaboration area
Final Site layout Site			le	ircula	& Security tion/ Flow		Bus access at rear Enclosed	Separate Buses and Car drop-offs in front Patio	Bus access at rear Patio
amenities Impact to Abutters				cuid	tion/ Flow	amenities	outdoor courtyard	off of the Commons	off of the Commons
		F	+			t to abutters	Playing fields may impact abutters	Playing fields may impact abutters	Playing fields may impact abutters
er 1. 1			Fi	nal Sit	e layout	-	School setback from street	School setback from street	School setback from street
Civic Image / Aesthetics			7 an	nenitie	e layout Site	ved image ansform aesthetics	Athletic fields & parking in front yard	Athletic fields & parking in front yard	Athletic fields & parking in front yard
Tabala		<u> </u>	Ab	utters	Impact to		All new construction = all new image	All new construction = all new image	All new construction = all new image
Totals									
5 4 3 2	positive / most advantageous neutral	8	Civi	c Imag	ge / Aesthetics				

100 Service DRA

Discussion

Building Committee & School Committee

October 24, 2023





Thank you!

Please note:

Upcoming Community Meetings:November 9Marshfield Town Hall6 pmDecember 5Rockland Senior Center7 pmDecember 14Whitman Town Hall7 pm

Building Committee & School Committee

October 24, 2023



