



**PERKINS —
EASTMAN**

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DENNIS-YARMOUTH SCHOOL PROJECT

SCHOOL BUILDING COMMITTEE

April 11, 2018



SCHEDULE AND DECISIONS


- Wednesday, Jan. 10 – SBC (review options – preferred site)
- Wednesday, Jan. 31 – Abutters Meeting #1
- Wednesday Jan. 31 – SBC (options refinements, massing & shadow studies)
- Thursday, Feb. 15 – SBC (options refinements + systems & energy modeling)
- Wednesday, Feb. 28 – SBC (options refinements + re-evaluation of sites and plans)
- Wednesday, Feb. 28 – Abutters Meeting #2
- Wednesday, Mar. 8 – SBC Selection of Preferred Solution

- Wednesday, Apr. 11 – SBC (cost discussion following estimate reconciliation)
- **Monday, Apr. 23 – Joint BoS, Finance, School Committee**
- Wednesday, Apr. 25 – SBC (vote to submit Preferred Schematic Report)
- Wednesday, May 9 – Compile & Submit PSR
- Wednesday, May 23 – MSBA Facilities Assessment Subcommittee Meeting
- Wednesday, Jun. 27 MSBA Board of Directors (for PSR approval)

PROJECT SCHEDULE (1/2)

Mattacheese MS - Master Project Schedule			PMA MSBA Project Layout												05-Apr-18 11:44																					
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	
Mattacheese MS - Master Project Schedule																																				
OPM Selection																																				
A1000	OPM Interviews	0	26-Jan-17A																																	
A1010	OPM Selection Period	10	26-Jan-17A	31-Jan-17A																																
A1020	MSBA OPM Selection Panel	1	06-Mar-17A	06-Mar-17A																																
Designer Selection																																				
A1030	OPM Draft Designer RFS	5	01-Feb-17A	07-Mar-17A																																
A1400	Newspaper Ad Submission	1	09-Mar-17A	09-Mar-17A																																
A1040	MSBA Approval Designer RFS	10	07-Mar-17A	15-Mar-17A																																
A1380	Central Register Ad Submission (Thursday Deadline)	1	15-Mar-17A	15-Mar-17A																																
A1060	Newspaper Advertisement Appears (Sunday)	1	19-Mar-17A	19-Mar-17A																																
A1360	Central Register Ad Appears (Wednesday)	1	22-Mar-17A	22-Mar-17A																																
A1050	Designer RFS Response Period	13	22-Mar-17A	07-Apr-17A																																
A1410	SBC Meeting (moved to Apr 12th)	1	12-Apr-17A	12-Apr-17A																																
A1430	Initial RFS Review - Prep for SBC Presentation	3	10-Apr-17A	12-Apr-17A																																
A1070	Evaluate Responses & Submit to MSBA	5	10-Apr-17A	13-Apr-17A																																
A1420	Complete Reference Checks	10	10-Apr-17A	26-Apr-17A																																
A1080	Designer Selection Panel Mtg #1	0		02-May-17A																																
A1090	Designer Selection Panel Mtg #2	0		16-May-17A																																
A1100	Negotiate & Execute Contract	10	17-May-17A	15-Jun-17A																																
Preliminary Design Program																																				
A1110	School Dept Update Education Program	60	14-Mar-17A	15-Jun-17A																																
A1470	PMA Project Presentation to Joint BoS/Fincm	1	27-Jun-17A	27-Jun-17A																																
A1480	Formation of D-Y Regionalization Subcommittee (BoS & Fincm)	1	11-Jul-17A	11-Jul-17A																																
A1500	Educational Leadership Team Meeting #01 [23Aug18]	1	23-Aug-17A	23-Aug-17A																																
A1130	Evaluation of Existing Conditions	55	16-Jun-17A	31-Aug-17A																																
A1480	Visioning Session #1 [20Sep18]	1	20-Sep-17A	20-Sep-17A																																
A1490	Visioning Session #2 [28Sep18]	1	27-Sep-17A	27-Sep-17A																																
A1150	Preliminary Evaluation of Alternatives	90	15-Jun-17A	05-Oct-17A																																
A1120	Draft Initial Space Summary	4	20-Sep-17A	18-Oct-17A																																
A1140	Establish Site Development Requirements	15	20-Sep-17A	18-Oct-17A																																
A1190	Education Program Refined with Designer Input	81	16-Jun-17A	18-Oct-17A																																
A1210	Cost & Schedule Analysis of PDP Alternatives	18	05-Oct-17A	08-Nov-17A																																
A1200	Final Review & Acceptance of Education Program	5	18-Oct-17A	15-Nov-17A																																
A1220	SBC Approval of PDP Alternatives (11/15/17 Deadline)	5	18-Oct-17A	15-Nov-17A																																
A1180	Compile & Submit PDP to MSBA	4	16-Nov-17A	21-Nov-17A																																
A1170	MSBA Review Period	15	22-Nov-17A	01-Feb-18A																																
A1180	Respond to MSBA Review Comments	10	02-Feb-18A	15-Feb-18A																																
Preferred Schematic Report																																				
A1230	Evaluation of Existing Conditions (Phase II Exploration)	22	14-Dec-17A	12-Jan-18A																																
A1240	Final Evaluation of Alternatives	30	25-Jan-18A	08-Mar-18A																																
A1250	Identification and Development of Preferred Solution	20	08-Mar-18A	26-Mar-18A																																
A1600	PE Compile Scope for Estimators	6	08-Mar-18A	26-Mar-18A																																
A1450	PSR Estimates Due	10	26-Mar-18A	06-Apr-18A																																
A1610	Reconcile PSR Estimates	3	06-Apr-18	10-Apr-18	8																															
A1260	PMA Draft Local Actions and Approvals Document	4	26-Apr-18	01-May-18	0																															
A1310	Compile and Submit PSR [Due 09May18]	5	03-May-18	09-May-18*	0																															
A1290	MSBA Facilities Assessment Subcommittee Option #1 [23May18]	1	23-May-18	23-May-18*	0																															
Legend: ■ Actual Work ■ Critical Remaining Work ■ Remaining Work ◆ Milestone																																				

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PMA Consultants

PROJECT SCHEDULE (2/2)

[illegible]

PREFERRED OPTION: S2 – SITE

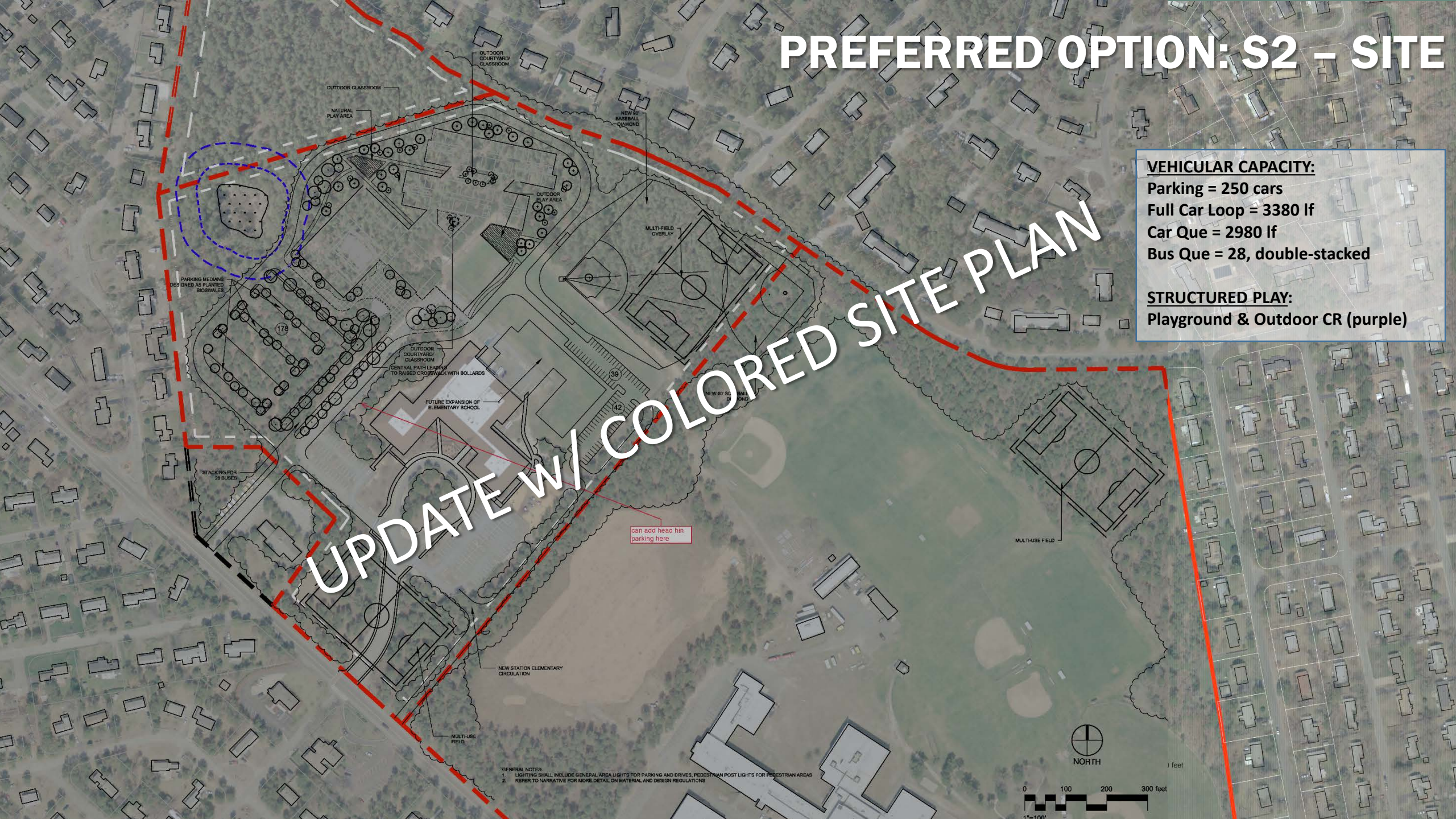
VEHICULAR CAPACITY:

Parking = 250 cars
Full Car Loop = 3380 lf
Car Que = 2980 lf
Bus Que = 28, double-stacked

STRUCTURED PLAY:

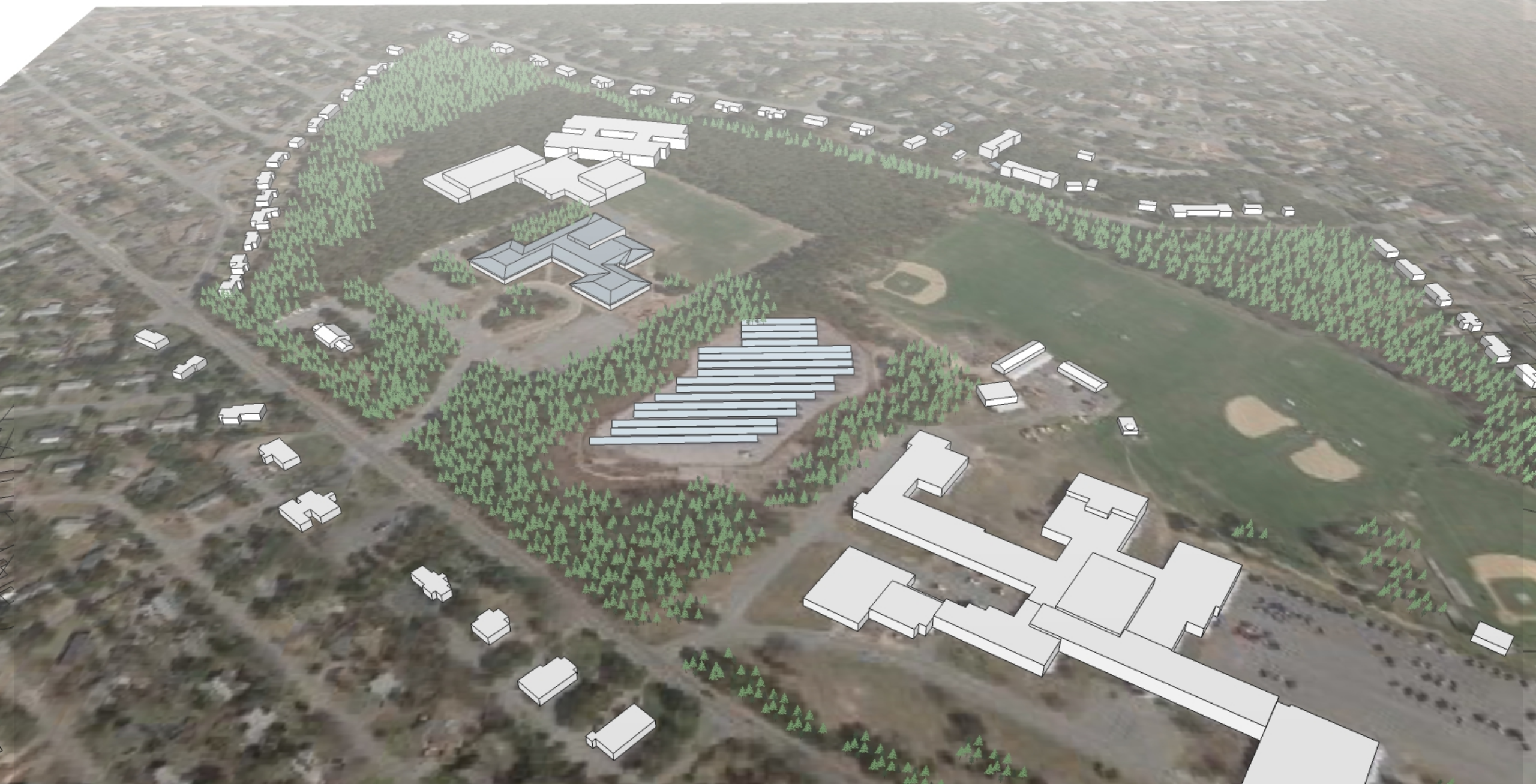
Playground & Outdoor CR (purple)

UPDATE W/ COLORED SITE PLAN



GENERAL NOTES:
1. LIGHTING SHALL INCLUDE GENERAL AREA LIGHTS FOR PARKING AND DRIVES, PEDESTRIAN POST LIGHTS FOR PEDESTRIAN AREAS
2. REFER TO NARRATIVE FOR MORE DETAIL ON MATERIAL AND DESIGN REGULATIONS

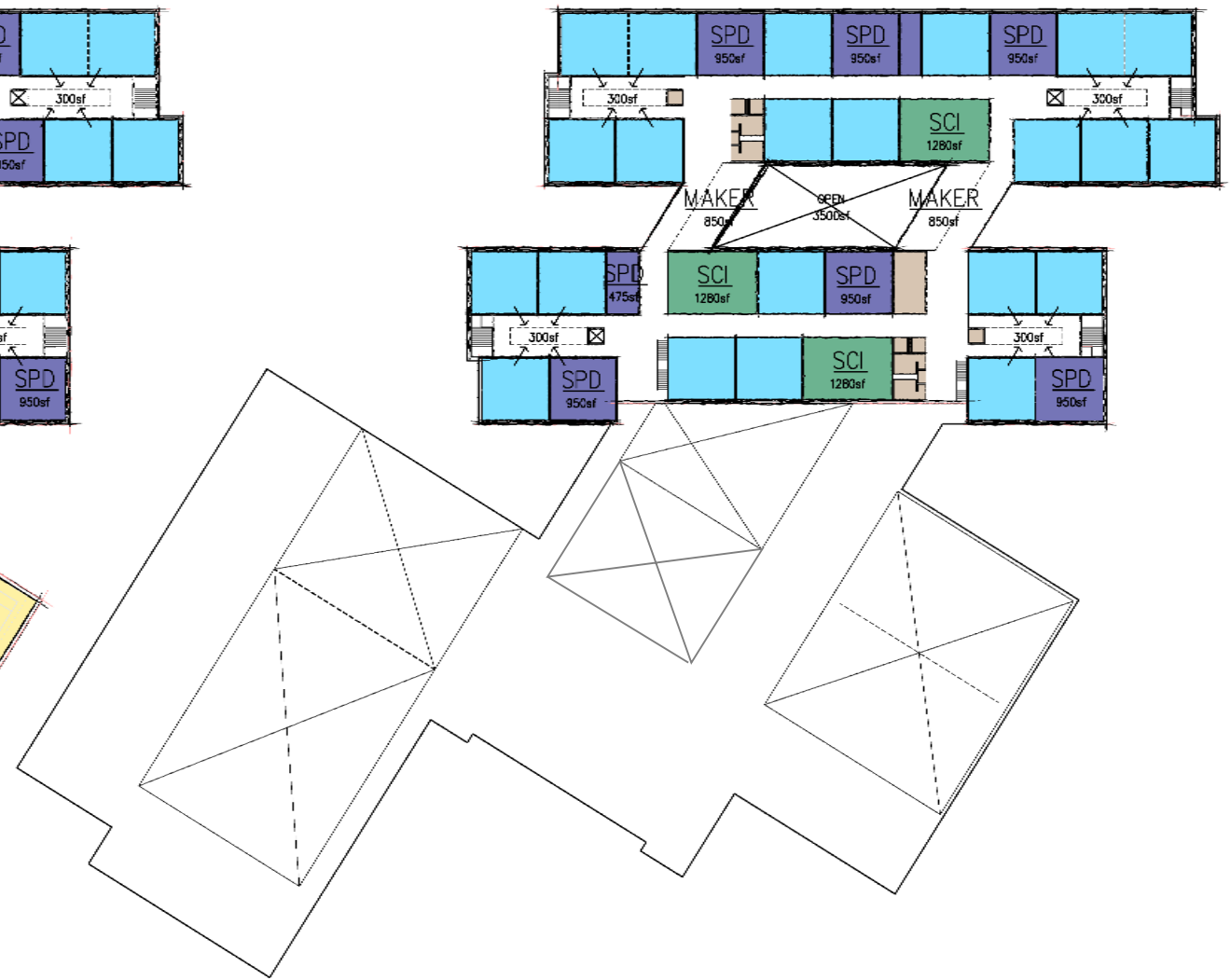
MASSING STUDIES – S2



S2 COMMUNITY FRONT (GR. 4-7)



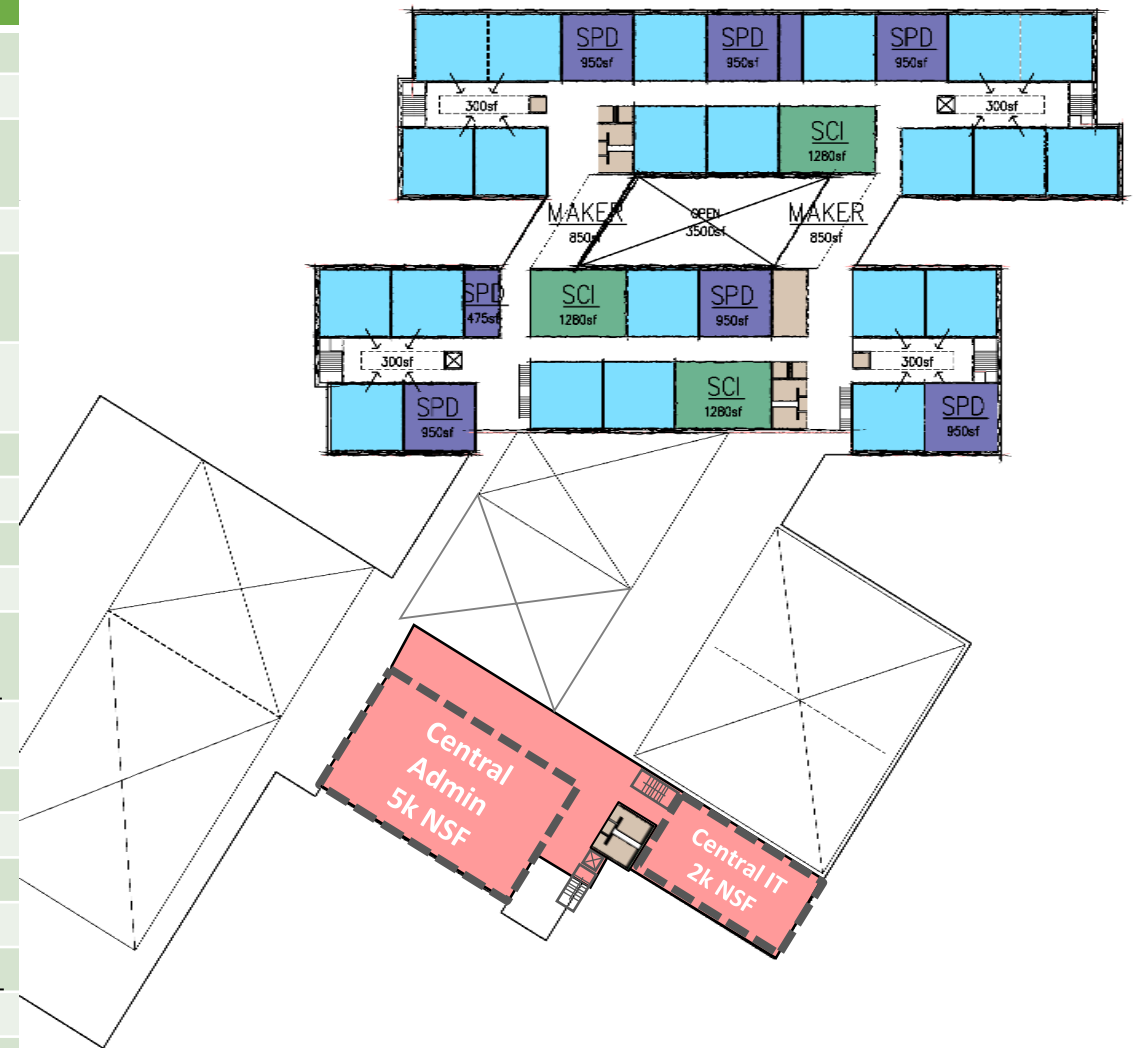
1ST FLOOR PLAN



2ND FLOOR PLAN

CENTRAL OFFICE PROGRAM (PRELIMINARY)

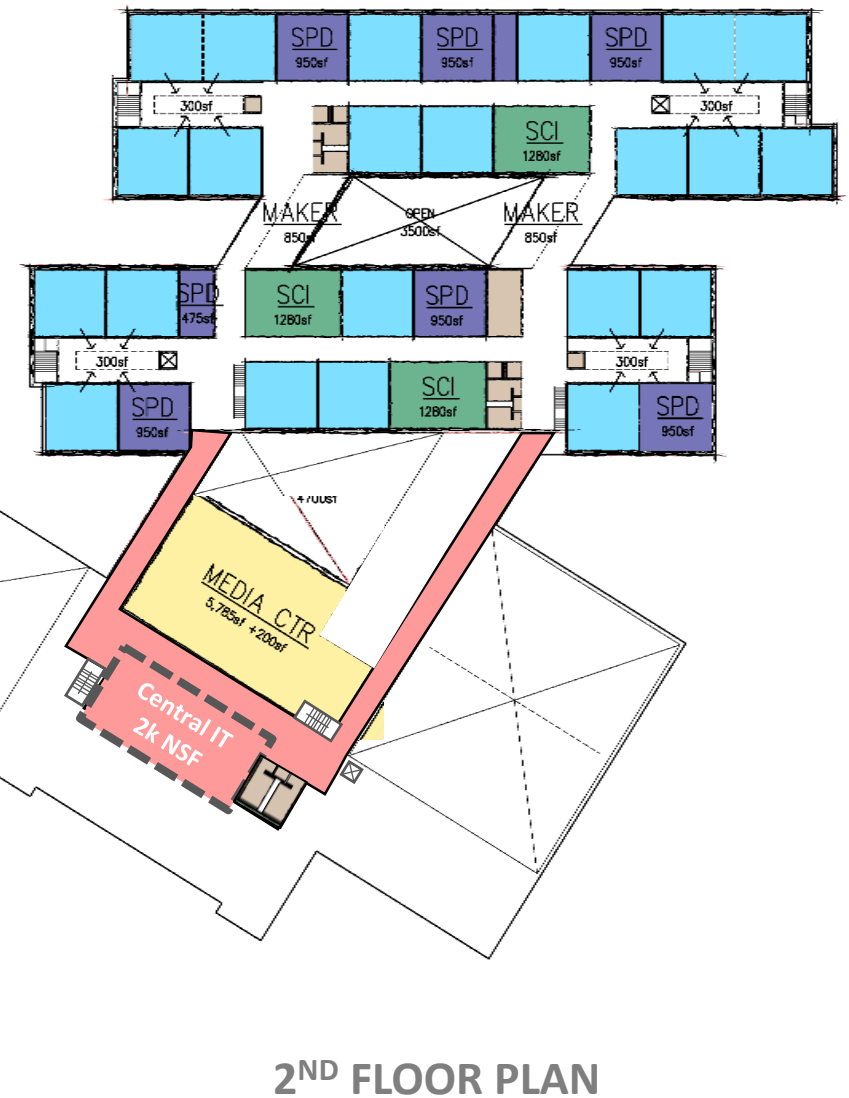
Administration Central Office				
Reception/Waiting (Asst Supt Sec.)	250	1	250	
Superintendent's Office	375	1	375	
Offices (Pupil Services, Curriculum Coords, Data Admin)	150	4	600	
Open Work Area (3 secretaries)	240	1	240	
Offices (Assist Super, HR, Benefits, Bus Dispatch)	150	4	600	
Open Work Area for Acctng + Food Serv Dir. (6 people)	480	1	480	
Active Files	200	1	200	
Archive Room	400	1	400	
Supplies	70	1	70	
Kitchen/Lunch Room	300	1	300	
Conference Rooms	630	2	1260	
			4,775	
IT Central Office				
Director's Office (Shared w/Assist Dir.)	250	1	250	
Secretary - open work area	100	1	100	
Technicians Work Area (locked)	600	1	600	
District Server Room	1,000	1	1,000	
Equipment Storage Room	300	1	300	
			2,250	
			7,025	



2ND FLOOR PLAN

7,025 NSF x 1.25 (walls, corridors, stairs, toilets) = approx. 8,800 GSF

CENTRAL OFFICE - ALTERNATE



7,025 NSF x 1.25 (walls, corridors, stairs, toilets) + 4,000 additional Circ. = 12,800 GSF

ENERGY USE

ELECTRICITY

NATURAL GAS

	Building SF	kWh	Solar	Total kWh	Cost	Cost PSF	Therm	Cost	Cost PSF
WIXON	116,900	156,005	406,171	562,176	\$28,081	\$0.24	66,116	\$26,895	\$0.23
MATTACHEESE	122,207	311,088	233,740	544,828	\$55,996	\$0.46	81,673	\$33,206	\$0.27
TOTAL	239,107	467,093	639,911	1,107,004	\$84,077	\$0.70	147,789	\$60,101	\$0.50
NEW BUILDING	183,700	1,102,200	TBD	1,102,200	\$198,396	\$1.08	37,440	\$15,350	\$0.08

Note: The New Building has full Air Conditioning

The New Building does not factor in any solar array

Without Solar the cost of Electricity for the two existing schools would be \$199,261

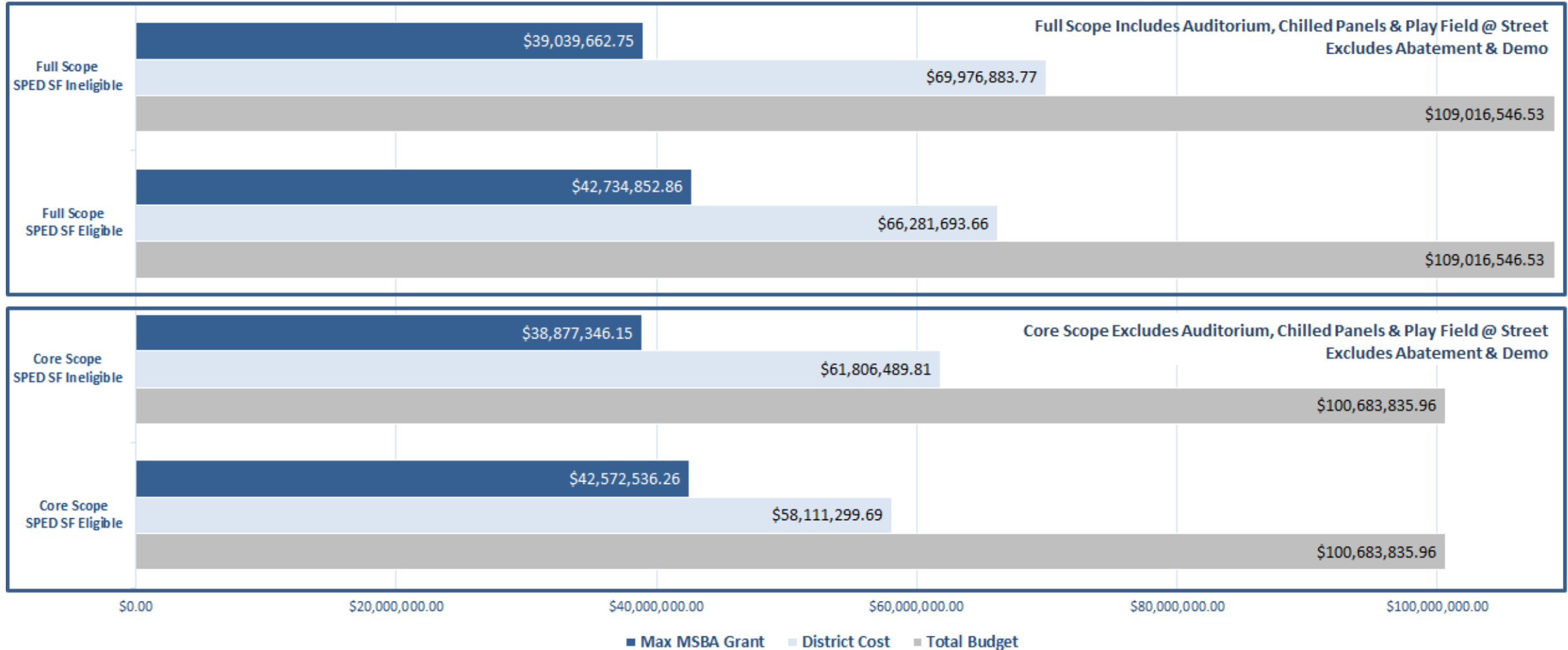
FS ESTIMATE RECONCILIATION

		PM&C / PSR			Variance	AM F / PSR		
		Gross Floor Area		183,700		Gross Floor Area		183,700
		Total Cost	PSF	Cost/GSF/New		Total Cost	PSF	Cost/GSF/New
BUILDING CONSTRUCTION COST	SUBSTRUCTURE							
	Foundations	\$ 1,178,493	\$ 6.42	\$ 1,178,493	\$ (392,491)	\$ 1,570,984	\$ 8.55	\$ 1,570,984
	Special Foundations	\$ 1,632,000	\$ 8.88	\$ 1,632,000	\$ -	\$ 1,632,000	\$ 8.88	\$ 1,632,000
	Slab on Grade	\$ 1,946,047	\$ 10.59	\$ 1,946,047	\$ 36,386	\$ 1,909,661	\$ 10.40	\$ 1,909,661
	SHELL							
	Super Structure	\$ 6,815,353	\$ 37.10	\$ 6,815,353	\$ 488,545	\$ 6,326,808	\$ 34.44	\$ 6,326,808
	Exterior Walls	\$ 6,405,394	\$ 34.87	\$ 6,405,394	\$ (246,097)	\$ 6,651,491	\$ 36.21	\$ 6,651,491
	Exterior Windows	\$ 4,322,500	\$ 23.53	\$ 4,322,500	\$ (101,925)	\$ 4,424,425	\$ 24.09	\$ 4,424,425
	Exterior Doors	\$ 87,170	\$ 0.47	\$ 87,170	\$ (5,880)	\$ 93,050	\$ 0.51	\$ 93,050
	Roofing	\$ 3,438,150	\$ 18.72	\$ 3,438,150	\$ (117,021)	\$ 3,555,171	\$ 19.35	\$ 3,555,171
	INTERIORS							
	Interior Construction	\$ 6,201,038	\$ 33.76	\$ 6,201,038	\$ 298,058	\$ 5,902,980	\$ 32.13	\$ 5,902,980
	Staircases	\$ 121,000	\$ 0.66	\$ 121,000	\$ (10,625)	\$ 131,625	\$ 0.72	\$ 131,625
	Interior Finishes	\$ 4,228,066	\$ 23.02	\$ 4,228,066	\$ (8,801)	\$ 4,236,867	\$ 23.06	\$ 4,236,867
	SERVICES							
	Conveying Systems	\$ 154,000	\$ 0.84	\$ 154,000	\$ 2,250	\$ 151,750	\$ 0.83	\$ 151,750
	Plumbing	\$ 2,376,856	\$ 12.94	\$ 2,376,856	\$ (314,349)	\$ 2,691,205	\$ 14.65	\$ 2,691,205
	HVAC	\$ 8,969,320	\$ 48.83	\$ 8,969,320	\$ 315,254	\$ 8,654,066	\$ 47.11	\$ 8,654,066
	Fire Protection	\$ 873,270	\$ 4.75	\$ 873,270	\$ 19,065	\$ 854,205	\$ 4.65	\$ 854,205
	Electrical	\$ 6,092,165	\$ 33.16	\$ 6,092,165	\$ (701,061)	\$ 6,793,226	\$ 36.98	\$ 6,793,226
	EQUIPMENT & FURNISHINGS							
	Equipment	\$ 1,257,705	\$ 6.85	\$ 1,257,705	\$ 17,430	\$ 1,240,275	\$ 6.75	\$ 1,240,275
	Furnishings	\$ 2,063,500	\$ 11.23	\$ 2,063,500	\$ 1,157	\$ 2,062,343	\$ 11.23	\$ 2,062,343
DEMO	SPECIAL CONSTRUCTION & DEMOLITION							
	Existing Building Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	In-Bldg Hazardous Materials Abatement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Site Remediation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SITE	BUILDING SITEWORK							
	Site Preparation	\$ 781,348	\$ 4.25	\$ 781,348	\$ (134,592)	\$ 915,940	\$ 4.99	\$ 915,940.00
	Site Improvements	\$ 3,590,624	\$ 19.55	\$ 3,590,624	\$ 259,658	\$ 3,330,966	\$ 18.13	\$ 3,330,966
	Site Civil/ Mechanical Utilities	\$ 1,298,625	\$ 7.07	\$ 1,298,625	\$ (17,568)	\$ 1,316,193	\$ 7.16	\$ 1,316,193
	Site Electrical Utilities	\$ 473,900	\$ 2.58	\$ 473,900	\$ 107,650	\$ 366,250	\$ 1.99	\$ 366,250
	TOTAL CONSTRUCTION -- BUILDING/SITE	\$ 64,306,524	\$ 350	\$ 64,306,524	\$ (504,957)	\$ 64,811,481	\$ 353	\$ 64,811,481
	DESIGN & PRICING CONTINGENCY @12%	\$ 7,716,783	\$42.01	\$ 7,716,783	\$ -60,595	\$ 7,777,378	\$42	\$ 7,777,378
	ESCALATION @7%	\$ 5,041,631	\$27.44	\$ 5,041,631	\$ -39,589	\$ 5,081,220	\$27.66	\$ 5,081,220
	GENERAL CONDITIONS	\$ 5,394,546	\$29.37	\$ 5,394,546	\$ -819,061	\$ 6,213,606	\$33.82	\$ 6,213,606
	GENERAL REQUIREMENTS	w/above	\$0.00	\$0	#VALUE!	w/above	\$0.00	\$0
	P&P BOND @1%	\$ 765,248	\$4.17	\$ 765,248	\$ -636,462	\$ 1,401,710	\$7.63	\$ 1,401,710
	INSURANCE	\$ 956,560	\$5.21	\$ 956,560	#VALUE!	w/above	\$0.00	\$0
	OVERHEAD AND PROFIT	\$ 2,926,116	\$15.93	\$ 2,926,116	\$ 793,981	\$ 2,132,135	\$11.61	\$ 2,132,135
		\$ 87,107,408	\$ 474	\$ 87,107,408	\$ (310,122)	\$ 87,417,530	\$476	\$ 87,417,530

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FEASIBILITY COST ESTIMATES

DYIMS Feasibility (PSR) Estimates w/ MSBA Form 3011

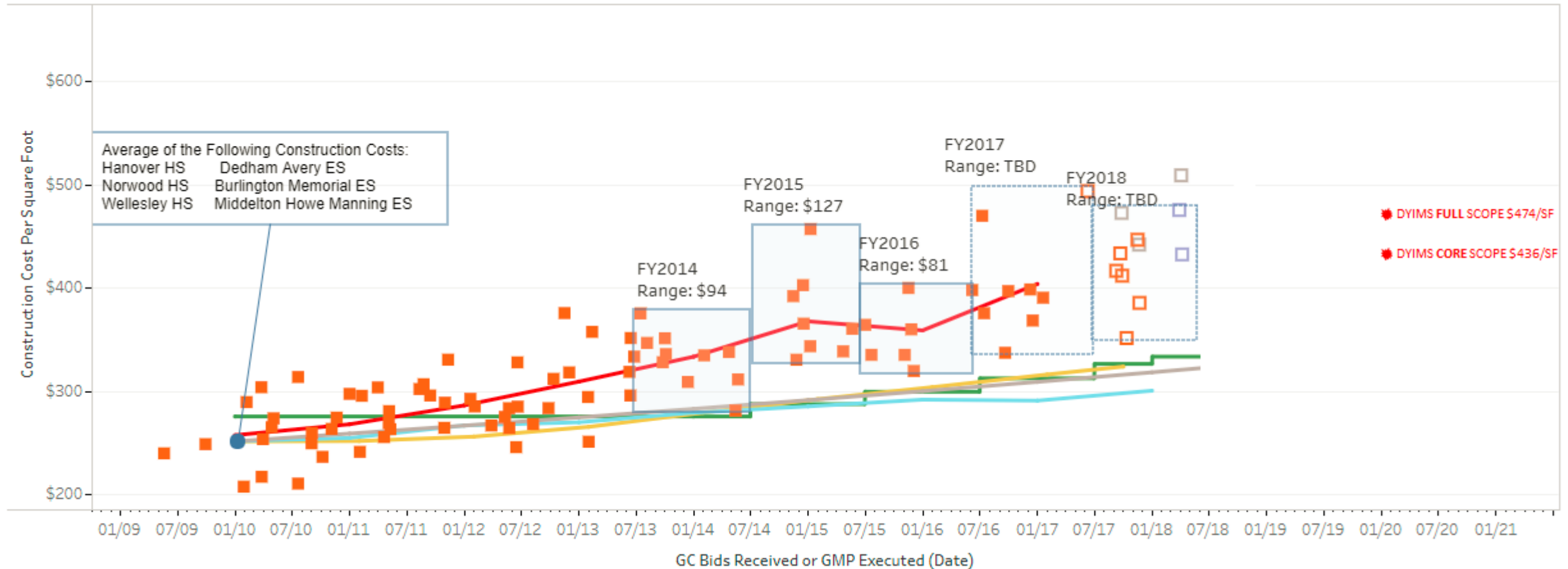


DYIMS COST VARIABLES

Items Exceeding Average MSBA Cost/SF Data:

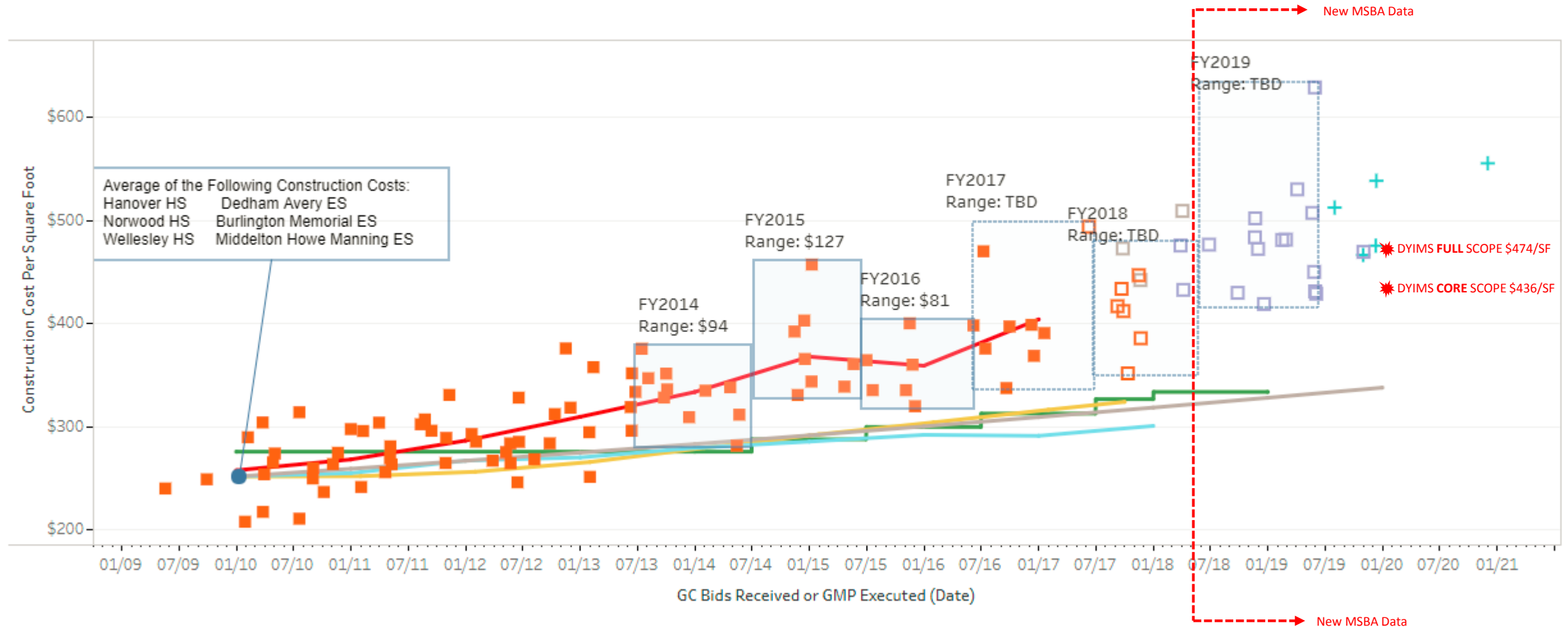
- General Condition / General Requirement Increase from 8% to 10.5% Due to Limited Competition in Market (+\$2.2M)
- Rammed Aggregate Piers (“Geopiles”) Required due to Liquefaction Concerns Identified 4/7/18 (+\$2M)
- Chilled Radiant Panels, Requiring 150 Ton Chilled Water Plant (+\$1.5M)
- Auditorium at \$750SF + Corresponding Soft Cost Exclusions
- Triple Glazed, High Impact Windows
- Large Quantity of Play Fields

MSBA ESCALATION FY10'-FY18'



Source: <http://info.massschoolbuildings.org/TabPub/TableauCostData.aspx>

MSBA ESCALATION FY19'-FY20'



Source: <http://info.massschoolbuildings.org/TabPub/TableauCostData.aspx>



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EASTMAN**

Photo courtesy of TripAdvisor



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