



COVE Meeting

CITIZENS' CONSTRUCTION OVERSIGHT AND VALUE ENGINEERING

June 20, 2019

REVISED - COVE Meeting Agenda

Thursday, June 20, 2019 @ 8:00 a.m.
Facilities Services - Building 200
6501 Magic Way, Orlando, Florida 32809

- I. **Call to Order and Approval of May COVE Meeting Minutes -**
Ksenia Merck, Chairman ----- Pg. 1-4
- II. **Departmental Reports**
 - Project Status Report - Jeff Hart/Mark O'Connor ----- Pg. 5-13
 - Change Order Update - Ed Ames ----- Pg. 14-20
 - Capital Renewal Update - Rory Salimbene ----- Pg. 21-29
- III. **Presentations/Reports**
- IV. **Discussion and Adjournment**
 - July meeting has been cancelled.
 - A School Bus Tour will be conducted on August 8, 2019, in lieu of August 15, 2019 COVE Meeting.
 - The next official COVE Meeting will held on September 19, 2019.

COVE MEETING MINUTES



The Construction Oversight and Value Engineering Committee (COVE) monthly meeting convened on Thursday, May 16, 2019 at 8:05 a.m., at Facilities Services, 6501 Magic Way, Bldg. 200, Orlando, Florida 32809.

COVE Members in Attendance: Ksenia Merck, Pat Knipe, James Knapp, Stuart Kramer, Mario Cuello, and Douglas Kelly.

OCPS Staff in Attendance: John Morris, Laura Kelly, Judith Padres, Dale Kelly, Basem Ghneim, Jeff Hart, Mark O'Connor, Mari Espinal, Rory Salimbene, Mike Winter, Linda Lindsey, Alva Johnson, Rocco Williams, Ganesh Jiawon, Toni Greene, Mariangeles Garcia and Sandra Roopwah (as scribe).

Call to Order:

A quorum was established and Chairman Ksenia Merck called the meeting to order at 8:05 a.m.

Approval of Minutes

The minutes from March 21, 2019 and April 18, 2019 were presented and approved by the committee with the following revisions:

Douglas Kelly requested the following revisions for March 21, 2019 minutes:

- On page one, replace “had” with “have to” in the last sentence.
- On page two, second paragraph under “M/WBE Update” change “Seminole County” to “Seminole State.”
- On page three, under “Prototypes and Design Guidelines in the first paragraph, change “Presented” to “presented.”
- On page four, first line in paragraph four, replace “to make” with “that,” insert “be made” after presentation, and replace “that” with “who.”
- On page five, last sentence under FCA update, replace “re-valuate” with “re-evaluate.”

Ksenia Merck requested clarification as to what constitutes a quorum because the COVE Charter states telephonic presence is acceptable. Laura Kelly explained that since COVE is a committee subject to the Sunshine Law, the requirements of the law override the provisions of the Charter. Since the Charter was adopted in 2002, there has been clarification from the Attorney General’s Office that requires a member be physically present to constitute a quorum. Laura Kelly mentioned that she spoke with the General Counsel and he recommends that a committee be formed to review and recommend revisions to the Charter. Ksenia Merck asked the Committee members to review the Charter and advise of any issues that need to be address before it is amended. Pat Knipe requested a copy of the COVE Charter. A copy of the COVE Charter will be emailed to each member.

A copy of Ksenia Merck's notes from the Facilities Board Workshop was distributed and added to the April COVE minutes for inclusion.

Jeff Hart indicated for April 18, 2019 minutes, under "Project Status" the "s" from "Water Springs" needs to be deleted.

The minutes were approved with the above edits.

Departmental Reports

➤ **Finance Report**

Judith Padres stated that there have been no changes to the budget this month. She indicated that the category titled "Other Funds" from her report was missing and it will be sent via email.

Judith Padres gave two cash flow handouts to the Committee that replaced pages 12 and 13 of her report. The handouts addressed the cash flow based on whether Facilities proceeded with addressing priorities 1-3 or priorities 1-5 as identified in the Facilities Condition Assessment.

Stuart Kramer asked if the \$24 million "Estimated Revenues" is for FY19. Judith Padres explained that it is the projected collection from now through June 30, 2019.

Douglas Kelly asked what "Functional Equity" is. Jeff Hart explained that it is a program designed to assess whether additional facilities are warranted based on an existing school's permanent student stations and square feet versus that of the respective prototype's permanent student stations and square feet, along with the projected student enrollment.

Stuart Kramer asked if there is anticipated to be an increase in impact fees. Dale Kelly stated that there is no anticipated increase in impact fees reflected in the budget; however, the impact fee revenue is difficult to predict because it is based on the current economy and housing market.

Judith Padres provided a follow-up regarding Capital Renewal Cash Flow.

Dale Kelly provided an update on sales tax projections and highlighted that the funds collected last month were \$21.5 million. To date the District is over budget by 5.99 percent.

➤ **Project Status**

Mark O'Connor conveyed that there are no significant changes to the budget to report this month.

Jeff Hart reported that there are currently 13 projects under construction amounting

to approximately \$316 million. He briefed the Committee on projects under construction, substantial completions, anticipated future milestones, projects in closeout and those in the design phase. He also presented various photos of the Pine Hills Transportation Compound.

Pat Knipe inquired about the definition of a CFI. Jeff Hart explained it is the abbreviation for Certificate of Final Inspection.

Toni Greene asked the Committee to consider moving the August 15, 2019 meeting to August 8, 2019, for the annual bus tour of a new school since school reopens on August 12, 2019.

Mario Cuello asked if there are cameras on the school buses currently being used. Jeff Hart responded in the affirmative.

➤ **Capital Renewal Update**

Rory Salimbene noted that there are currently 53 active projects in progress for improvements at 44 sites with an estimated total cost of \$204.5 million and construction cost of approximately \$157 million. The active projects increased by four (4) since the last report.

Mario Cuello asked if the District has considered utilizing wireless BAS (Building Automation System) controls. Jeff Hart said the District has engaged in this practice and is evaluating it further.

Presentation

Facilities Conditions Assessments Update

Basem Ghneim presented an update on the Facilities Conditions Assessment (FCA) and an overview of the Capital Program. He showed the initial plan started in Fiscal Year (FY) 2013, the revisions that were implemented in FY14 to advance Capital Renewal for Group 3 schools, and FY20 update presented to the Board on April 16, 2019, with actuals for projects FY13 thru FY19, plus projected Capital needs FY20 thru FY29.

Further, the presentation compared the Plan vs Performance for FY13-FY19 period for three program elements: the 2003 Sales Tax List, the New Relief Schools and Capital Renewal. Performance for Sales Tax and Relief Schools exceeded expectations due to acceleration of some schools plus the introduction of K-8 schools in lieu of renovating smaller K-5 schools. Performance for the Capital Renewal program was short of expectations due to the planned slow down to accommodate acceleration of Capital projects opening in 2017 and 2018.

A Capital Renewal Fund Tracking slide was presented. The Tracking projected needs for FCA priorities 1-3 and priorities 1-5 against the projected revenue for a period of ten (10) years (FY20-FY29). The presenter pointed out the following:

- Current Sales Tax initiative concludes December 31, 2025, and the final CR fund transfer from Sales Tax 2 is in FY27.
- At the conclusion of the current Sales Tax initiative and if FCA priorities 1-5 were implemented, the expected ending balance is estimated to be \$195 million, but if the program were extended thru the 10-year budget of FY29, the CR needs exceed the available funds.
- At the conclusion of the current Sales Tax initiative and if FCA priorities 1-3 were implemented, the expected ending balance is estimated to be \$435 million, and if extended to FY29, the ending balance is estimated to be \$202 million.
- Based on the projected needs, such balances could be depleted within three (3) years of the end of Sales Tax 2. Therefore, the option to solicit support to extend the Sales Tax initiative must be considered, or other funding sources will be needed.

James Knapp asked about the type of roof the District currently installs. Basem Ghneim explained that currently the District is installing single-ply fully adhered roofs with a life expectancy of 20 years. He stated that the District does have a few older schools with metal roofs that have a higher life expectancy of 35 years.

Mario Cuello asked if there is a tendency to replace HVAC versus refurbish and/or repair. Jeff Hart mentioned that the District does refurbish at times when it is feasible and practicable.

Adjournment

- The committee voted unanimously to cancel the July COVE meeting and to conduct a school bus tour on August 8, 2019 in lieu of the August 15, 2019 COVE meeting.
- The next meeting will be held on Thursday, June 20, 2019, at 8 a.m., at Facilities Services, 6501 Magic Way, Bldg. 200, Orlando, FL 32809.
- As there were no further business, the meeting was adjourned at 9:43 a.m.

Minutes Authenticated by:

Ksenia Merck
Chairman COVE Committee

Date of approval

Laura L. Kelly
Legal Services Facilities

Date of approval



**PROJECT STATUS SUMMARY REPORT
NEW AND REPLACEMENT SCHOOLS
June 20, 2019**

Funding Source	Priority #	School Name	F1 Original 2019 Board Adopted Budget	F2 Adopted Budget Changes	F3 Current Board Adopted Budget	Estimated Cost At Completion	Variance	GMP Amount	F4 Construction Change Orders		F5 ODP Change Orders		Approved Construction		F6 Number of Days Past Substantial (Close-out)	Contract Type	CM / GC Firm	AE Firm				
									Amount	#	Deducts	#	NTP Construct	Contract Subst. Com								
Budget																			Schedule		Contracting	
PLANNING PHASE																						
Impact		Site 118-E-SW-5	24,290,000	-	24,290,000	24,290,000																
Sales Tax	135	OTC Winter Park Campus	30,800,000	-	30,800,000	30,800,000																
		Sub Total	55,090,000	-	55,090,000	55,090,000																
DESIGN PHASE																						
Impact	New	Site 80-H-SW-4	115,040,000	-	115,040,000	115,040,000																
Impact	New	Site 83-E-SE-3	24,290,000	1,239,000	25,529,000	25,529,000																
Impact	New	Site 85-E-W-4	24,290,000	-	24,290,000	24,290,000																
Impact	New	Site 113-H-W-4	115,040,000	-	115,040,000	115,040,000																
Sales Tax		Magnolia School and Behavior Center	45,000,000	2,600,000	47,600,000	47,600,000																
Sales Tax	134	Site 73-T-W-7 (OTC Westside Campus)	36,500,000	-	36,500,000	36,500,000																
Sales Tax	125	Winegard ES	21,400,000	1,690,000	23,090,000	23,090,000																
		Sub Total	381,560,000	5,529,000	387,089,000	387,089,000																
CONSTRUCTION PHASE																						
Impact	New	Site 20-E-SW-4	24,290,000	-	24,290,000	24,290,000	-	19,866,684			(4,966,671)	1	5/17/2019	4/10/2020		GMP	CORE	Rhodes + Brito				
Impact	New	Castleview ES (Site 25-E-SW-4)	23,300,000	-	23,300,000	23,063,000	237,000	18,515,591	161,784	3	(4,890,018)	2	6/1/2018	6/18/2019		GMP	CPPI	BRPH				
Impact	New	Water Spring ES (Site 49-E-W-4)	23,260,000	-	23,260,000	22,797,000	463,000	18,048,328	152,813	2	(4,880,087)	2	6/1/2018	6/24/2019		GMP	Welbro	Schenkel				
Impact	New	Horizon West MS (Site 37-M-SW-4)	38,614,000	-	38,614,000	38,372,000	242,000	30,366,051	-	2	(9,016,459)	3	2/23/2018	07/01/2019		GMP	Wharton	Harvard Jolly				
Sales Tax		Boone HS (Auditorium, gym, cafeteria)	31,000,000	-	31,000,000	31,000,000	-	12,006,991			(2,921,487)	2	6/20/2018	06/24/2019		GMP	Williams Co	Schenkel				
Sales Tax		Colonial HS (Auditorium)	17,000,000	-	17,000,000	17,000,000	-	13,836,772	49,611	1	(3,459,193)	2	6/8/2018	07/31/2019		GMP	Gilbane	Schenkel				
Sales Tax	119	Deerwood ES	22,361,000	-	22,361,000	22,361,000	-	18,690,486	58,251	1	(4,672,621)	1	6/1/2018	10/15/2019		GMP	Pirtle	Schenkel				
Sales Tax	120	Pershing School (Site 208-K8-SE-3)	39,007,000	-	39,007,000	39,007,000	-	29,563,321	202,197	6	(7,322,440)	1	2/23/2018	6/3/2019		GMP	Williams Co	Zyschovich				
Sales Tax	128	Pinar ES	19,000,000	1,008,000	20,008,000	20,008,000	-	16,333,189					6/17/2019	10/20/2020		GMP	RL Burns	Schenkel				
Sales Tax	121	Rolling Hills ES	20,100,000	-	20,100,000	20,100,000	-	15,988,088					6/17/2019	05/29/2020		GMP	Pirtle	Zyschovich				
CIT	New	Pine Hills Transportation	31,000,000	-	31,000,000	31,000,000	-	21,742,090	776,267	6	(5,177,553)	3	9/21/2017	11/19/2018		GMP	Ajax	BRPH				
		Sub Total	288,932,000	1,008,000	289,940,000	288,998,000	\$942,000	\$214,957,591	\$1,400,923	21	(47,306,530)	17										
CLOSE OUT PHASE																						
Impact	New	Audubon Park School (Site 133-K8-E-6)	39,043,000	-	39,043,000	39,043,000	-	31,003,724	(303,876)	3	(8,502,182)	3	3/17/2017	7/24/2018	331	GMP	Welbro	Baker Barrios				
Impact	Relief	Timber Springs MS (Site 21-M-E-2)	36,998,000	-	36,998,000	36,998,000	-	30,047,858	(175,273)	4	(7,843,625)	3	2/1/2016	6/23/2017	727	GMP	Pirtle	Hunton Brady				
Sales Tax	124	Frangus ES	23,470,000	-	23,470,000	23,037,000	433,000	18,622,711	86,472	2	(4,580,721)	1	7/25/2017	10/30/2018	233	GMP	Williams Co	BRPH				
Sales Tax	130	Hidden Oaks ES	19,056,000	-	19,056,000	19,056,000	-	14,608,038	170,273	3	(3,630,193)	2	7/24/2017	09/18/2018	275	GMP	CORE	Harvard Jolly				
Sales Tax	129	Hungerford ES	22,522,000	-	22,522,000	22,522,000	-	14,723,364	106,450	4	(3,684,500)	1	7/27/2017	10/30/2018	233	GMP	Gilbane	Schenkel				
Sales Tax	New	Lake Como School (Site 205-K8-SW-6)	37,810,000	-	37,810,000	36,679,000	1,131,000	30,108,765	181,858	3	(7,359,254)	2	2/7/2017	6/19/2018	366	GMP	Williams Co	Harvard Jolly				
Sales Tax	127	Maxey ES (Site 207-E-W-7)	17,790,000	-	17,790,000	17,608,000	182,000	14,609,699	(271,741)	5	(3,508,718)	2	7/17/2017	7/17/2018	338	GMP	Clancy & Theys	Schenkel				
Sales Tax	New	OCPS ACE (PS8 Site 131-PS8-SW-5)	61,103,000	-	61,103,000	61,103,000	-	51,499,557	243,050	7	(13,294,657)	2	4/16/2015	8/7/2017	682	GMP	Williams Co	Baker Barrios				
Sales Tax	106	Pine Hills ES	21,634,000	-	21,634,000	21,271,000	363,000	17,489,097	(306,980)	2	(4,028,915)	2	7/20/2017	7/26/2018	329	GMP	Pirtle	BRPH				
Sales Tax	123	Ventura ES Replacement	24,711,000	-	24,711,000	24,711,000	-	18,338,709	52,538	12	(3,888,544)	2	10/1/2015	10/10/2017	618	GMP	Turner	Schenkel				
		Sub Total	304,137,000	-	304,137,000	302,028,000	2,109,000	241,051,522	(217,230)	45	(60,321,309)	20										
Grand Total			1,029,719,000	6,537,000	1,036,256,000	1,033,205,000	3,051,000	456,009,112	1,183,694	66	(107,627,839)	37										

Footnotes

- F1 - Reflects figure from the 10yr Capital Budget dated September 11, 2018.
- F2 - Reflects changes to the FY 2019 board adopted budget.
- F3- Amount comprised of prior year expenditures, current and future planned funding (Summary Budget FY 2019). There are no land costs included.
- F4 - Reflects total number of change orders and cumulative change order amount. Does not include ODP deductive and reconciliation change orders.
- F5 - Reflects the total amount and number of ODP deductive and reconciliation change orders to date.
- F6 - Reflects number of days beyond substantial completion. See justification below under Close Out Delays.

Close Out Delays

- Audubon Park School** – CFI awaits upgrade of the public safety radio distribution system.
- Frangus ES** – CFI delayed due to completion of punch list activities, reconciliation of final project costs and upgrade of the public safety radio distribution system.
- Hidden Oaks ES** – CFI delayed due to reconciliation of final project costs and upgrade of the public safety radio distribution system.
- Hungerford ES** – CFI delayed due to completion of building 8, receipt of as-built and record documents, processing bill of sale documents for offsite improvements, reconciliation of final project costs and upgrade of the public safety radio distribution system.
- Lake Como School** – CFI awaits upgrade of the public safety radio distribution system.
- Maxey ES** - CFI awaits upgrade of the public safety radio distribution system.
- Timber Springs MS** – CFI delayed due to corrective work required to be performed on the soccer field which was not discovered until post substantial completion and upgrade of the public safety radio distribution system.
- OCPS ACE** - CFI delayed due to corrective work required to be performed on the soccer field which was not discovered until post substantial completion and upgrade of the public safety radio distribution system.
- Pine Hills ES** - CFI awaits upgrade of the public safety radio distribution system.
- Ventura ES** – CFI delayed due to reconciliation of final project costs and time impacts and upgrade to the public safety radio distribution system.

Other

Boone HS: GMP amount represents the sum of the Auditorium and Generator Packages.



PROJECT STATUS SUMMARY REPORT
NEW AND REPLACEMENT SCHOOLS
June 20, 2019

Funding Source	Priority #	School Name	Explanation of Adopted Budget Changes
DESIGN PHASE			
Impact	<i>New</i>	Site 83-E-SE-3	The budget was amended on May 28, 2019 to include cost for an off-site pond and the two-way radio communication system.
Sales Tax		Magnolia School and Behavior Center	The budget was amended on May 28, 2019 to include costs associated with revising the Behavior Center from a one-story building to a two-story building and adding the two-way radio communication system.
CONSTRUCTION PHASE			
Sales Tax	<i>128</i>	Pinar ES	The budget was amended on May 28, 2019 to account for higher than projected market conditions and adding the two-way radio communication system.
Sales Tax	<i>125</i>	Winegard ES	The budget was amended on May 28, 2019 to account for higher than projected market conditions and adding the two-way radio communication system.



PROJECT STATUS SUMMARY REPORT

COMPREHENSIVE SCHOOLS

June 20, 2019

Funding Source	Priority #	School Name	F1 Original 2019 Board Adopted Budget	F2 Adopted Budget Changes	F3 Current Board Adopted Budget	Estimated Cost At Completion	Variance	GMP Amount	F4 Construction Change Orders		F5 ODP Change Orders		Approved Construction		F6 Number of Days Past Substantial (Close-out)	Contract Type	CM / GC Firm	AE Firm	
									Amount	#	Deducts	#	NTP Construct	Contract Subst. Com					
Budget										Schedule				Contracting					
PLANNING PHASE																			
Sales Tax	133	OTC Mid-Florida Campus	81,600,000	-	81,600,000	81,600,000													
Sales Tax	136	OTC Orlando Campus	25,000,000	-	25,000,000	25,000,000													
		Sub Total	106,600,000	\$0	\$106,600,000	\$106,600,000													
DESIGN PHASE																			
Sales Tax	65	Acceleration West	14,000,000	-	14,000,000	14,000,000													
Sales Tax	132	Meadow Woods MS	25,204,000	-	25,204,000	25,204,000													
		Sub Total	39,204,000	-	\$39,204,000	\$39,204,000													
CONSTRUCTION PHASE																			
Sales Tax	100	Corner Lake MS	21,151,000	-	21,151,000	21,058,000	93,000	13,851,636	245,087	3	(3,462,909)	1	3/9/2018	7/26/2019		GMP	Wharton	C.T. Hsu	
Sales Tax	118	Lake Gem ES	17,317,000	-	17,317,000	16,747,000	570,000	11,125,623	134,030	2	(2,110,329)	1	6/20/2018	8/1/2019		GMP	Wharton	Hunton Brady	
Sales Tax	111	Lake George ES	13,381,000	-	13,381,000	13,381,000	-	8,699,086	67,484	2	(2,174,772)	1	6/20/2018	7/26/2019		GMP	CORE	Hunton Brady	
Sales Tax	108	Southwest MS	25,204,000	-	25,204,000	24,903,000	301,000	15,899,687			(2,918,793)	1	2/15/2019	7/27/2020		GMP	Walker	C.T. Hsu	
Sales Tax	116	Sunrise ES	13,186,000	-	13,186,000	13,186,000	-	8,786,527			(2,196,632)	1	6/20/2018	7/26/2019		GMP	CORE	Hunton Brady	
		Sub Total	90,239,000	\$0	\$90,239,000	\$89,275,000	964,000	\$58,362,559	446,600	7	(12,863,434)	5							
Actual																			
CLOSE OUT PHASE																			
Sales Tax	92	Dover Shores ES (Jackson MS)	22,150,000	-	22,150,000	21,964,000	186,000	18,029,283	99,058	3	(3,827,740)	3	7/18/2017	12/7/2018	195	GMP	CPPI	Rhodes & Brito	
Sales Tax	93	Sally Ride ES	20,448,000	-	20,448,000	20,256,000	192,000	15,663,493	279,033	3	(3,603,742)	2	7/17/2017	10/23/2018	240	GMP	Charles Perry	Song & Assoc	
Sales Tax	105	Union Park ES	19,950,000	-	19,950,000	19,950,000	-	16,317,570	105,022	2	(3,195,456)	2	7/27/2017	10/26/2018	237	GMP	Pirtle	Zyscovich	
		Sub Total	62,548,000	\$0	\$62,548,000	\$62,170,000	\$378,000	50,010,346	483,112	8	(10,626,937)	7							
Grand Total			298,591,000	-	298,591,000	\$297,249,000	\$1,342,000	108,372,905	929,713	15	(23,490,371)	12							

Footnotes

- F1 - Reflects figure from the 10yr Capital Budget dated September 11, 2018.
- F2 - Reflects changes to the FY 2019 board adopted budget.
- F3- Figure comprised of prior year expenditures, current and future planned funding (Adopted Summary Budget FY 2019). There are no land costs included.
- F4 - Reflects total number of change orders and cumulative change order amount. Does not include ODP deductive and reconciliation change orders.
- F5 - Reflects the total amount and number of ODP deductive and reconciliation change orders to date.
- F6 - Reflects number of days beyond substantial completion. See justification below under Close Out Delays.

Close Out Delays

- Dover ShoresES** – CFI awaits upgrade of the public safety radio distribution system.
- Sally Ride ES** – CFI delayed due to reconciliation of final project costs and upgrade of the public safety radio distribution system.
- Union Park ES** – CFI delayed due to completion of punch list activities, reconciliation of final project costs, and upgrade of the public safety radio distribution system.

Construction Update as of June 11, 2019

We now have **16 projects under construction** amounting to approx. **\$380M**.

5 – Comprehensive = \$90,239,000

- **Corner Lake MS** (Comprehensive Renovation) – NTP was issued on March 9, 2018, and involves four separate phases with an overall substantial completion scheduled for July 26, 2019.
 - The initial phase involving the renovation of the cafeteria/kitchen, gymnasium, band/chorus and play courts/track were completed in August 2018; the second phase involving the renovation of Classroom building 3 was completed on December 14, 2018. Phase 3, renovation of classroom building 2 was recently completed on May 31, 2019. The 4th and last phase, scheduled to be completed July 26, 2019, is currently underway accounting for the renovation of the Administration, Media and Votech buildings, along with the balance of the site related items.
- **Lake Gem ES** (Comprehensive Renovation) – Construction NTP was issued on June 20, 2018, and involves six separate phases including the addition of a twelve classroom building, with an overall substantial completion scheduled for August 1, 2019.
 - The initial phase involving a new Central Energy Plant and a new 12 classroom building was substantially completed on December 20, 2018. The second phase involving the renovation of Classroom Building 5 was substantially completed on February 8, 2019. The third phase involving the renovation of Classroom Building 6 was completed on March 22, 2019. Phase 4 - the renovation of Classroom Building 3 was completed on May 1, 2019. And recently commenced with Phase 5 - the renovation of Classroom Building 2, is scheduled for completion on July 3, 2019. The 6th and final phase, the renovation of Admin/Media and Cafeteria buildings is scheduled for completion by August 1, 2019.
- **Lake George ES** (Comprehensive Renovation) – Construction NTP was issued on June 20, 2018, and involves five separate phases with an overall substantial completion scheduled for July 26, 2019.
 - The initial phase involving the renovation of Classroom Building 5 was substantially completed on December 14, 2018. The second phase involving the renovation of Classroom Building 3 was substantially completed on February 8, 2019. The third phase involving the renovation of Classroom Building 6 was completed on April 12, 2019. Phase 4 involving the renovation of Classroom Building 2 was just completed on June 10, 2019. The 5th and final phase, the renovation of Admin/Media and Cafeteria buildings is scheduled for completion by July 26, 2019.

- **Sunrise ES (Comprehensive/Renovation)** – Construction NTP was issued on June 20, 2018, and involves five separate phases with an overall substantial completion scheduled for July 26, 2019.
 - The initial phase involving the renovation of Classroom Building 3 was substantially completed on December 14, 2018. The second phase involving the renovation of Classroom Building 5 was substantially completed on February 7, 2019. The third phase involving the renovation of Classroom Building 6 was completed on April 12, 2019. Phase 4 involving the renovation of Classroom Building 2 was just completed on June 11, 2019. The 5th and final phase, the renovation of Admin/Media and Cafeteria buildings is scheduled for completion by July 26, 2019.
- **Southwest MS (Comprehensive Renovation)** – NTP was issued on February 15, 2019, and involves five separate phases with an overall substantial completion scheduled for July 27, 2020.
 - Phase 1 separated into three sub-phases is underway involving the renovation of the (1A) chiller yard and replacement of chillers, and (1B) administration, gymnasium, cafeteria, and classroom building 900 are scheduled to be substantially completed by July 30, 2019, and (1C) classroom building 200 scheduled to be completed by December 27, 2019.

And,

11 - New/Replacements = \$289,940,000

- **Pine Hills Transportation Compound** – a construction NTP was issued on September 21, 2017, for this Design-Build transportation project, with an overall project completion scheduled for November 2018. The project schedule milestones account for multiple phases, with the Bus Parking and Staging areas to have been completed by March 8, 2018, the administration building to be substantially complete in August 2018, and the driver’s lounge and parking, along with the maintenance building to be substantially completed in November 2018.

Due to unsuitable soils material discoveries, and additional excavation and replacement thereof, the project has experienced extensive time delays and requests for additional compensation, whereby the Design-Builder is now reporting an overall projected substantial completion date of August 30, 2019.

- Initial phase involving the Bus Parking and Staging areas was substantially completed on December 10, 2018, and the Administration Building was completed on January 8, 2019.
- The driver’s Lounges and associated parking were completed on February 14, 2019; and are now occupied.

- Based on claims issued by the Design-Builder, additional scope and cost associated with discovered unsuitable soils and debris amount to over \$2M. In addition, additional debris and loose soils have been uncovered at the location for the new fueling island, and are now being addressed.
- **Horizon West Middle School** (Bridgewater area relief) - construction NTP was issued on February 23, 2018, with an overall project substantial completion originally scheduled for May 29, 2019.
 - Due to the delayed start associated with sand skink mitigation measures and gopher tortoise relocations, mobilization for construction was not granted until April 24, 2018, resulting in a 2 month delay. The team worked out an agreement with the CM to mitigate the overall delay to 33 days, with a revised substantial completion date of July 1, 2019.
- **Pershing School** (K8 Replacement) - construction NTP was issued on February 23, 2018, with an overall project substantial completion originally scheduled for May 15, 2019.
 - Due to code required modifications to the fire alarm system to add a voice evacuation component; as well as, delays associated with water supply to the site from OUC, the overall project completion date was revised to June 17, 2019. Based on current progress it is anticipated the completion will more likely be by the end of June 2019.
- **Castleview Elementary School** (South of Reams Road area relief) - construction NTP was issued on June 1, 2018, with an overall substantial completion originally scheduled for May 3, 2019.
 - Due to delays associated with receiving the required ROW and E-Permits through Orange County, the building substantial completion has been revised to May 31, 2019, and the site related elements have been extended to June 18, 2019. Based on current progress, we anticipate substantial completion by mid to late June 2019.
- **Water Spring Elementary** (Horizon West/Village H area relief) - construction NTP was issued on June 1, 2018, with an overall substantial completion scheduled for June 24, 2019.
- **Deerwood ES** (Replacement) - construction NTP was issued on June 1, 2018, and a main building substantial completion was achieved on June 11, 2019; and the subsequent existing building demo and related site amenities are scheduled for completion by October 15, 2019.
- **Colonial HS – Auditorium** (Replacement) - construction NTP was issued on June 8, 2018, with an overall substantial completion scheduled for July 31, 2019.
 - Due to impacts associated with existing underground utilities, and the need for the school to utilize the existing band building over the summer, the demolition of the existing band building and related sitework will not be completed until late August/early September 2019.
- **Boone HS – Auditorium** (Replacement) - construction NTP was issued on June 20, 2018, with an overall substantial completion scheduled for June 24, 2019.

- **Site 20-E-SW-4** (South I-Drive area relief) - construction NTP was issued on May 17, 2019, with an overall substantial completion scheduled for April 10, 2020.
- **Pinar ES (Replacement/Renovation)** - construction NTP is anticipated by June 17, 2019, and the completion of the new main building is scheduled for substantial completion on April 3, 2020; and the subsequent existing building demo and related site amenities are scheduled for completion by October 20, 2020.
- **Rolling Hills ES (Replacement/Renovation)** - construction NTP is anticipated by June 17, 2019, with an overall substantial completion scheduled for May 29, 2020.

Since our last report:

- Substantial Completions achieved:
 - **Corner Lake MS** - Phase 3 renovation of classroom building 2 was substantially completed on May 31, 2019.
 - **Lake George ES and Sunrise ES** - both completed their respective Phase 4s involving the renovation of Classroom Building 2s on June 10 & 11, 2019, respectively.
 - **Deerwood ES** – initial main building phase was substantially completed on June 11, 2019.
- Notice to Proceeds issued:
 - **Site 20-E-SW-4** - a construction notice to proceed was issued on May 17, 2019.
- Anticipated future milestones for construction:
 - **Winegard ES** - a construction notice to proceed is anticipated for late-June 2019.
 - **Castlevue ES** - anticipates a building substantial completion and an overall site and roadway completion by mid to late June 2019.
 - **Pershing School** - anticipates an overall project substantial completion by the end of June 2019.
 - **Water Spring Elementary** - an overall substantial completion is scheduled for June 24, 2019.
 - **Boone HS – Auditorium** - an overall substantial completion scheduled for June 24, 2019.
 - **Site 83-E-SE-3** (SE Orlando/Lee Vista area relief) – an early site package construction notice to proceed is anticipated to be issued on June 24, 2019.
 - **Horizon West Middle School** - an overall project substantial completion is scheduled for July 1, 2019.
 - **Magnolia School and Behavior Center** - a construction notice to proceed is anticipated for late-June/early July 2019.
 - **Corner Lake MS** - overall substantial completion is scheduled for July 26, 2019.

- **Lake George ES and Sunrise ES** - both are anticipating the completion of their respective 5th and final phase, the renovation of Admin/Media and Cafeteria buildings is scheduled for completion by July 26, 2019.
- **Lake Gem ES** - Phase 5, the renovation of Classroom building 2, is scheduled for completion on July 3, 2019; and phase 6, the renovation of Admin/Media and cafeteria, as well as, the overall substantial completion is scheduled for August 1, 2019.
- **Colonial HS – Auditorium** - substantial completion of the new auditorium building is scheduled for July 31, 2019.

For:

Close-out

- We continue with (13) projects in close-out:
 - Timber Springs MS
 - OCPS Academic Center for Excellence (ACE)
 - Ventura ES
 - Audubon Park School*
 - Lake Como School*
 - Maxey ES*
 - Pine Hills ES*
 - Hidden Oaks ES
 - Sally Ride ES
 - Union Park ES
 - Frangus ES
 - Hungerford ES
 - Dover Shores ES/Jackson MS Athletic areas and road re-alignment*

Note: It has been decided, a project’s CFIs should not be presented to the Board for approval, if a public safety radio frequency assessment has determined that additional measures are warranted.

*Indicates all close-out requirements are complete, other than the Radio Enhancement measures.

For:

Design

- We currently have (10) projects in the design phase:
 - Magnolia School and Behavior Center
 - Winegard ES
 - Site 85-E-W-4 (Horizon West/Bridgewater Village South relief)
 - Site 83-E-SE-3 (SE Orlando/Lee Vista area relief)
 - Meadow Woods MS
 - Site 113-H-W-4 (Horizon West/Village F relief)
 - Site 80-H-SW-4 (Dr. Phillips area relief)
 - Acceleration West
 - Boone HS Gymnasium
 - Site 73-T-W-7 – Replacement campus for Orange Technical College – Westside Campus

Anticipated future milestones for Design:

- Orange Technical College – Orlando Campus (Comprehensive Renovation)

Change Orders Report

Facilities & Construction Contracting
March 2019

There are no significant change orders or amendments to report for the month of March 2019.

Facilities & Construction Contracting

COVE Report for March 2019

CONTRACTS AMENDED							
ITEM NO	SCHOOL	REASON FOR CHANGE	NAME OF FIRM	DESCRIPTION OF SERVICES	AMENDMENT	APPROVAL REQUIRED	CPSC DATE
1	Blankner K-8 School	Additional design services for paint evaluation of main building for select renovations, replacement of existing building systems and painting, capital renewal project. (Est. Constr. Cost \$40,000.00)	BRPH Architects-Engineers, Inc.	Amendment No. 04 to Agreement No. 1405SCON001BRPH for Architectural & Engineering Services RFQ No. 1405PS	\$1,548	Sr. Construction Director	3/7/2019
2	Boone HS	Language modification to correct scrivener's error in the commencement date of AM 2 (GMP) for auditorium, gymnasium and kitchen/cafeteria onsite replacement project.	Williams Company Building Division, Inc.	Amendment No. 03 to Agreement No. 17CM11SCONWILLIAMS for Construction Management Services RFQ No. 17CM11	\$0	Sr. Facilities Executive Director	3/21/2019
3	Boone HS	Design services for parking lot expansion and rehabilitation impacted by the auditorium and gymnasium replacement for prototype high school gymnasium, onsite replacement school project. (Est. Constr. Cost \$184,053.00)	Schenkel & Shultz, Inc.	DCD No. 01 to Agreement No. 17RU14SCON001SCHENKEL for Architectural & Engineering Services RFQ No. 17RU14	\$16,705	Sr. Facilities Executive Director	3/14/2019
4	Deerwood ES Replacement	Additional services to design exceptional student educational inclusive playground to serve orthopedically or physically impaired students for prototype new school replacement project. (Original estimated construction cost \$14,700,000.00 with additional \$253,000.00 for combined total of \$14,953,000.00).	Schenkel & Shultz, Inc.	DCD No. 02 to Agreement No. 17RU09SCONSCHENKEL for Architectural & Engineering Services RFQ No. 17RU09	\$2,625	Sr. Facilities Executive Director	3/28/2019
5	District-Wide	Staffing schedule modifications to add additional subconsultants for continuing contract.	SGM Engineering, Inc.	Amendment No. 03 to Agreement No. 1514CCONSGM for Mechanical, Electrical & Plumbing Engineering Services RFQ No. 1514PS	\$0	Sr. Construction Director	3/28/2019

Facilities & Construction Contracting

COVE Report for March 2019

CONTRACTS AMENDED							
ITEM NO	SCHOOL	REASON FOR CHANGE	NAME OF FIRM	DESCRIPTION OF SERVICES	AMENDMENT	APPROVAL REQUIRED	CPSC DATE
6	Elementary School Site 83-E-SE-3	Additional surveying services for legal description and sketch for prototype new school relief project.	Leading Edge Land Services, Inc.	Amendment No. 02 to Work Authorization No. 1523062 for Surveying Services RFQ No. 1523PS	\$575	Director, Real Estate Management	3/21/2019
7	High School Site 113- H-W-4	Additional traffic analysis to comply with the Orange County Government Transportation Planning Division for prototype new school relief project. (Est. Constr. Cost \$88,000,000.00)	AVCON, Inc.	Amendment No. 02 to Work Authorization No. 1515152 for Civil Engineering Services RFQ No. 1515PS	\$10,778	Sr. Facilities Executive Director	3/21/2019
8	High School Site 80- H-SW-4	Additional traffic analysis to comply with the Orange County Government Transportation Planning Division for prototype new school relief project.	AVCON, Inc.	Amendment No. 01 to Work Authorization No. 1515166 for Civil Engineering Services RFQ No. 1515PS	\$10,778	Sr. Facilities Executive Director	3/14/2019
9	Pinewood ES	Reconciliation of DCD (\$30,264.72) for Phase 3 construction document revisions and additional construction administration services for approved campus- wide scope to merging requirements into a single package for existing central energy plant and HVAC components replacement, capital renewal project (Original Est. Constr. Cost \$2,500,000.00 plus additional \$838,000.00. Total Est. Constr. Cost \$3,338,000.00).	SGM Engineering, Inc.	Amendment No. 01 to Agreement No. 1702SCON002SGM for Architectural & Engineering Services RFQ No. 1702PS	\$30,265	Sr. Facilities Executive Director	3/7/2019

***Not Funded by Sales Tax or Capital Renewal**

Facilities & Construction Contracting

COVE Report for March 2019

CHANGE ORDERS APPROVED								
ITEM NO	SCHOOL	REASON FOR CHANGE	NAME OF FIRM	DESCRIPTION OF SERVICES	DOC #	C.O. AMOUNT	APPROVAL REQUIRED	CPSC DATE
1	Audubon Park K-8 133-K8-N-6	Final ODP reconciliation for new school replacement project.	Welbro Building Corporation, Inc.	Agreement No. 14CM33SCONWELBRO for Construction Management Services RFQ No. 14CM33	Change Order No. 04 to GMP AM 05	\$189,049	John T. Morris, Chief Facilities Officer	3/14/19
2	Boone HS	Estimated ODP for upgrade and replacement of expired systems for capital renewal project.	Williams Company Building Division, Inc.	Agreement No. 14CM06SCON002WILLIAMS for Construction Management Services RFQ No. 14CM06	Change Order No. 04 to GMP AM 03	(\$120,000)	Behalf of John T. Morris, Chief Facilities Officer	3/28/19
3	Chain of Lakes MS	Reconciliation of CCD 01 (\$15,081.61) for cost associated with re-ordering heater equipment to match existing electrical service, replacement of roof exhaust fans (A/E error - \$4,175.33), power to exhaust fan (scope requirement - \$8,160.14) and 47-days time extension for existing building systems, HVAC equipment replacement for capital renewal project.	ACY Contractors, LLC	Work Authorization No. 12CM14053B for Construction Management Services RFQ No. 12CM14	Change Order No. 02	\$12,335	Sr. Construction Director	3/7/19
4	Citrus ES	Final ODP reconciliation for HVAC system long lead items purchase for select renovation, upgrade and replacement of expired systems, capital renewal project.	Wharton-Smith, Inc.	Work Authorization No. 12CM14037B for Construction Management Services RFQ No. 12CM14	Change Order No. 02	\$75,934	John T. Morris, Chief Facilities Officer	3/14/19
5	Colonial HS	Estimated ODP for select existing building systems replacement, capital renewal project.	Gilbane Building Company	Agreement No. 14CM17SCON001GILBANE for Construction Management Services RFQ No. 14CM17	Change Order No. 01 to GMP AM 02	(\$956,891)	Behalf of John T. Morris, Chief Facilities Officer	3/7/19
6	Corner Lake MS	Additional scope of work in Buildings 100, 400, 500, 600, 700, 800, areas of the courtyard and site identified during walkthrough that were not included in original GMP for comprehensive project.	Wharton-Smith, Inc.	Agreement No. 16CM14SCONWHARTON for Construction Management Services RFQ No. 16CM14	CCD No. 01 to GMP AM 01	\$195,958	Superintendent / John T. Morris, Chief Facilities Officer	3/28/19

Facilities & Construction Contracting

COVE Report for March 2019

CHANGE ORDERS APPROVED								
ITEM NO	SCHOOL	REASON FOR CHANGE	NAME OF FIRM	DESCRIPTION OF SERVICES	DOC #	C.O. AMOUNT	APPROVAL REQUIRED	CPSC DATE
7	Elementary School Site 25-E-SW-4	Cost associated with relocation of Century Link utility cable to make way for main access road for prototype new school relief project.	Charles Perry Construction, Inc.	Agreement No. 17CM07SCONCHARLES for Construction Management Services RFQ No. 17CM07	CCD No. 01 to GMP AM 01	\$33,169	Sr. Facilities Executive Director	3/21/19
8	Elementary School Site 49-E-W-4	Estimated ODP for prototype new school relief project.	Welbro Building Corporation, Inc.	Agreement No. 17CM12SCONWELBRO for Construction Management Services RFQ No. 17CM12	Change Order No. 03 to GMP AM 01	(\$368,005)	John T. Morris, Chief Facilities Officer	3/28/19
9	Facilities Building 100A	Estimated ODP for HVAC system replacement/upgrade life safety project.	Clancy & Theys Construction Co.	Work Authorization No. 12CM14068C for Construction Management Services RFQ No. 12CM14	Change Order No. 01	(\$72,526)	John T. Morris, Chief Facilities Officer	3/28/19
10	Facilities Building 100B	Estimated ODP for HVAC system replacement/upgrade district capital project.	Clancy & Theys Construction Co.	Work Authorization No. 12CM14067B for Construction Management Services RFQ No. 12CM14	Change Order No. 01	(\$21,775)	John T. Morris, Chief Facilities Officer	3/28/19
11	Hidden Oaks ES Replacement	Three (3) days time extension due to delay in temporary certificate of substantial completion for prototype new school replacement project.	Core Construction Services of Florida, LLC	Agreement No. 16CM24SCONCORE for Construction Management Services RFQ No. 16CM24	Change Order No. 04 to GMP AM 01	\$0	Sr. Construction Director	3/28/19
12	Hungerford ES Replacement	Scope continuation associated with career and technical education building previously suspended due to an upcoming project. To repurpose the building into a career and technical education building and 266 days time extension for prototype new school replacement project.	Gilbane Building Company	Agreement No. 16CM25SCONGILBANE for Construction Management Services RFQ No. 16CM25	Change Order No. 05 to GMP AM 01	\$32,388	Board / John T. Morris, Chief Facilities Officer	3/21/19
13	Maxey ES 207-E-W-7	Eighteen (18) days time extension due to impacts related to conflicts with the canopy work for prototype new school replacement project.	Clancy & Theys Construction Co.	Agreement No. 16CM23SCONCLANCY for Construction Management Services RFQ No. 16CM23	Change Order No. 05 to GMP AM 02	\$0	Sr. Facilities Executive Director	3/14/19

Facilities & Construction Contracting

COVE Report for March 2019

CHANGE ORDERS APPROVED								
ITEM NO	SCHOOL	REASON FOR CHANGE	NAME OF FIRM	DESCRIPTION OF SERVICES	DOC #	C.O. AMOUNT	APPROVAL REQUIRED	CPSC DATE
14	Sally Ride ES	Reconciliation of CCD 03 (\$49,813.37) to accelerate the exceptional student education bus loop from Phase 3 existing building demolition, physical education, covered play buildings, walkway canopies and other site work to Phase 2 existing building renovation to allow completion before the 2018-19 school year for comprehensive needs project.	Charles Perry Construction, Inc.	Agreement No. 16CM07SCONCHARLES for Construction Management Services RFQ No. 16CM07	Change Order No. 04 to GMP AM 03	\$49,813	John T. Morris, Chief Facilities Officer	3/14/19
15	Timber Creek HS	Modifications to revise new fire alarm system with voice evacuation campus-wide and twenty (20) days time extension for select existing building systems renovation, capital renewal project.	Gilbane Building Company	Agreement No. 14CM17SCON003GILBANE for Construction Management Services RFQ No. 14CM17	CCD No. 02 to GMP AM 01	\$49,995	John T. Morris, Chief Facilities Officer	3/21/19

***Not Funded by Sales Tax or Capital Renewal**

OCPS FACILITIES & CONSTRUCTION CONTRACTING
RFQs in Progress: APRIL 2019

No.	Contract Description	Pre Submittal Meeting	Open Date	Shortlist Meeting	Interview Meeting	Board / CFO Date	Construction Cost	Status
RFQ 19CM04	CM Services for Orange Technical College-Orlando Campus Comprehensive Project	3/12/2019	4/2/2019	4/11/2019	4/23/2019	5/14/2019	\$20,160,000.00	On-Going
RFQ 19CM05	CM Services for Orange Technical College-Westside Campus Replacement Project	3/26/2019	4/16/2019	4/30/2019	5/14/2019	5/28/2019	\$27,000,000.00	On-Going
RFQ 1906PS	A/E Services for Orange Technical College-Orlando Campus Comprehensive Project	4/9/2019	4/30/2019	5/7/2019	5/21/2019	6/11/2019	\$18,000,000.00	On-Going
RFQ 1907PS	A/E Services for Magic Way Master Plan Project	4/17/2019	5/7/2019	5/17/2019	6/6/2019	6/25/2019	\$750,000.00	On-Going

Plan Year(s) Filter: FY13 - FY19
Inventory Group Filter: G3,G4,G5,G6

Project Elements

Location	Age (Wt'd)	Maint. Area	Project Number	Size	Gp	Site	Roofing	Structural	Exterior	Interior	Mechanical	Electrical	Plumbing	Life Safety	Technology	Conveyance	Specialties	Budget / Committed			Project Cost / Construction Cost				Construction Schedule																
																		Required Budget FY13 - FY19	Assigned to Date	Balance Uncommitted	Estimate Total Cost FY13 - FY20	Construction Amount Base	Change Orders Amount	#	ODP Deducts	#	NTP	Substantial Completion	Closed (Forecast)	Days Past Subst. Compl. (close-out)											
CAPITAL RENEWAL BUDGET																																									
BOARD APPROVED BUDGET																		304,828,376			377,128,376																				
PLANNING PHASE																																									
Colonial HS	21-Yr	NE	N0035.2	Lg	G3						✓	✓		✓	✓				-	-	5,624,000	4,700,000	-	-	-	-															
Glenridge MS	16-Yr	NE	N0088.0	Int	G4	✓					✓	✓		✓	✓				51,948	51,948	-	-	2,575,000	1,800,000	-	-	-	-													
Howard MS	18-Yr	SS	N0089.0	Lg	G3	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		-	-	10,700,000	8,200,000	-	-	-	-															
Lakeville ES	21-Yr	NW	N0068.0	Lg	G5	✓					✓	✓							555,744	43,344	512,400	4,270,000	3,000,000	-	-	-	-														
Lakeview MS	24-Yr	NW	N0097.0	Int	G3		✓												10,000	8,547	1,453	832,000	500,000	-	-	-	-														
Pinewood ES	22-Yr	NW	N0095.1	Int	G5														50,400	-	50,400	420,000	400,000	-	-	-	-														
Riverdale ES	21-Yr	NE	N0064.0	Lg	G5		✓				✓			✓	✓				577,540	176,260	401,280	3,344,000	2,475,000	-	-	-	-														
Rosemont ES	19-Yr	NW	N0090.0	Int	G5	✓							✓	✓	✓				-	-	-	2,100,000	1,600,000	-	-	-	-														
Thornbrooke ES	17-Yr	NW	N0091.0	Lg	G4	✓					✓	✓	✓	✓	✓				-	-	-	3,600,000	2,800,000	-	-	-	-														
Three Points ES	19-Yr	SS	N0092.0	Lg	G3	✓					✓	✓	✓	✓	✓				-	-	-	3,000,000	2,300,000	-	-	-	-														
Winter Park HS	14-Yr	NE	N0093.0	Lg	G3						✓	✓	✓	✓	✓				-	-	-	9,900,000	7,600,000	-	-	-	-														
Wolf Lake MS	13-Yr	NW	N0086.0	Int	G4						✓								327,629	178,349	149,280	1,244,000	525,000	-	-	-	-														
Unplanned Small Projects (Note 2)			49	Sm	G4-G7	Unplanned: 4 in FY19 and 45 in FY20												600,000	-	600,000	7,350,000	6,125,000																			
SUBTOTAL - PLANNING																		12 Projects (excludes unplanned Sm projects)			2,173,260			458,448			1,714,813			54,958,999				42,025,000							
DESIGN / PRE-CONSTRUCTION PHASE																																									
Acceleration East	17-Yr	NE	N0084.0	Lg	G4		✓				✓								534,891	234,032	300,859	3,161,000	2,620,000	-	-	-	-														
Bonneville ES	18-Yr	NE	N0027.0	Lg	G4		✓				✓	✓							570,971	203,571	367,400	3,674,000	2,700,000	-	-	-	-														
Boone HS	28-Yr	NE	N0101.0	Int	G3	✓													54,600	12,570	42,030	455,000	350,000	-	-	-	-														
Citrus ES	20-Yr	NW	N0057.1	Int	G3				✓			✓							385,000	-	385,000	385,000	350,000	-	-	-	-														
College Park MS	11-Yr	NE	N0075.1	Sm	G5		✓												31,646	13,286	18,360	153,000	125,000	-	-	-	-														
Colonial 9GC	19-Yr	NE	N0058.0	Lg	G4	✓	✓		✓	✓	✓		✓	✓					783,832	425,097	358,735	5,790,000	4,485,000	-	-	-	-														
Discovery MS	23-Yr	NE	N0036.0	Lg	G5				✓		✓	✓	✓	✓					2,190,354	1,090,539	1,099,815	12,977,000	9,800,000	-	-	-	-														
Freedom HS	16-Yr	SS	N0096.0	Int	G4						✓	✓	✓	✓	✓				266,400	131,719	134,681	2,220,000	1,600,000	-	-	-	-														
Jones HS	15-Yr	SS	N0059.2	Lg	G3	✓			✓	✓	✓	✓	✓	✓					1,736,838	804,845	931,993	9,299,000	7,150,000	-	-	-	-														
Ocoee MS	20-Yr	NW	N0026.0	Int	G3	✓					✓	✓	✓	✓					1,865,000	109,318	1,755,682	1,865,000	1,085,000	-	-	-	-														
Piedmont Lakes MS	26-Yr	NW	N0029.0	Sm	G5				✓			✓							625,000	166,409	458,591	625,000	130,129	-	-	-	-														
Ridgewood Park ES	13-Yr	NW	N0063.0	Int	G4	✓			✓			✓							285,617	174,737	110,880	924,000	620,000	-	-	-	-														
SUBTOTAL - DESIGN																		12 Projects			9,330,149			3,366,125			5,964,024			41,528,000				31,015,129							

Project Size Key
Lg - Constr. Amount > \$2M
Int - Constr. Amount > \$280K and < \$2M
Sm - Constr. Amount < \$280K

Notes

- Capital Renewal is the replacement of major systems and components needed to preserve the efficient operation of school facilities. Capital Renewal funds are intended for Groups G3, G4, G5, and G6 school facilities, and Project Elements greater than \$50,000 in Priorities P1, P2, and P3 (and incidental P4 or P5 Elements).
- "Unplanned Small Projects" assumes 15 projects per year, per Maintenance Area, at \$150K average per project.

Plan Year(s) Filter: FY13 - FY19 Inventory Group Filter: G3,G4,G5,G6						Project Elements														Budget / Committed			Project Cost / Construction Cost					Construction Schedule					
Location	Age (Wt'd)	Maint. Area	Project Number	Size	Gp	Site	Roofing	Structural	Exterior	Interior	Mechanical	Electrical	Plumbing	Life Safety	Technology	Conveyance	Specialties	Required Budget	Assigned to Date	Balance Uncommitted	Estimate Total Cost	Construction Amount	Change Orders	ODP	NTP	Substantial Completion	Closed (Forecast)	Days Past Subst. Compl. (close-out)					
																		FY13 - FY19			FY13 - FY20	Base	Amount	#					Deducts	#			
CONSTRUCTION PHASE																																	
Apopka HS	11-Yr	NW	N0143.14	Int	G5						✓							825,000	444,095	380,905	825,000	750,000	-	-	-	-	04/18/19A	08/09/19					
Blankner K8	18-Yr	NE	N0023.0	Lg	G4		✓		✓		✓	✓		✓			✓	6,250,000	6,131,811	118,189	6,250,000	5,449,595	(617,791)	1	(1,207,951)	2	03/28/18A	08/02/19					
Boone HS	28-Yr	NE	N0031.0	Lg	G3		✓			✓	✓	✓	✓	✓				25,001,000	21,187,763	3,813,237	25,001,000	17,189,003	220,065	2	(1,979,776)	3	02/12/18A	08/06/19					
Bridgewater MS	12-Yr	NW	N0143.17	Int	G4						✓							366,383	333,075	33,308	366,383	333,075	-	-	-	-	04/18/19A	08/09/19					
Castle Creek ES	13-Yr	NE	N0143.10	Sm	G4						✓							275,000	248,363	26,637	275,000	250,000	-	-	-	-	05/14/19A	08/09/19					
Catalina ES	12-Yr	SS	N0143.19	Sm	G4						✓							284,827	271,264	13,563	284,827	271,264	-	-	-	-	05/30/19A	09/26/19					
Colonial HS	21-Yr	NE	N0035.0	Lg	G3		✓		✓	✓	✓	✓		✓				5,754,000	4,799,338	954,662	5,754,000	4,126,473	-	-	(956,891)	1	02/11/19A	12/20/19					
Columbia ES	12-Yr	NE	N0143.11	Sm	G4						✓							275,000	253,496	21,504	275,000	252,586	-	-	-	-	03/20/19A	08/01/19					
Esteem Academy (AE)	26-Yr	NW	N0143.12	Sm	Repurp		✓											275,000	52,600	222,400	275,000	250,000	-	-	-	-	03/14/19A	07/11/19					
Freedom HS	16-Yr	SS	N0143.5	Sm	G4						✓							112,000	101,448	10,552	112,000	101,448	-	-	-	-	01/28/19A	08/02/19					
Gotha MS	25-Yr	NW	N0032.0	Lg	G5				✓	✓	✓	✓		✓				10,888,000	8,330,277	2,557,723	10,888,000	8,495,843	-	-	(1,420,776)	1	03/18/19A	05/18/20					
Lawton Chiles ES	20-Yr	NE	N0060.0	Int	G3		✓		✓									1,899,000	1,532,115	366,885	1,899,000	1,472,031	-	-	(150,500)	1	04/23/19A	09/20/19					
Northlake Park ES	20-Yr	SS	N0078.0	Int	G3						✓							1,361,000	1,174,241	186,760	1,361,000	1,109,804	-	-	(134,873)	1	04/10/19A	08/27/19					
Oakshire ES	20-Yr	SS	N0094.0	Lg	G3						✓							7,119,001	6,084,592	1,034,409	7,119,001	6,045,000	-	-	-	-	05/28/19A	09/18/20					
Ocoee MS	20-Yr	NW	N0026.1	Lg	G3		✓		✓	✓	✓	✓	✓				✓	5,116,000	4,408,231	707,768	5,116,000	4,019,174	-	-	(634,444)	1	04/11/19A	12/16/19					
Odyssey MS	19-Yr	NE	N0067.0	Lg	G3		✓			✓	✓			✓	✓			5,521,000	4,152,735	1,368,265	5,521,000	3,657,577	-	-	(457,556)	1	02/04/19A	11/27/19					
Olympia HS	19-Yr	NW	N0033.2	Lg	G3		✓		✓	✓	✓			✓	✓		✓	16,575,000	15,160,956	1,414,044	16,575,000	13,232,879	-	-	(2,144,835)	1	12/12/18A	02/11/20					
OTC-Avalon Campus	11-Yr	NE	N0143.1	Sm	G4						✓							184,000	168,315	15,685	184,000	167,437	-	-	-	-	01/28/19A	07/15/19					
Pinewood ES	22-Yr	NW	N0095.0	Lg	G5						✓							7,023,000	6,165,786	857,215	7,023,000	5,970,000	-	-	-	-	05/28/19A	09/18/20					
Riverdale ES	21-Yr	NE	N0143.13	Sm	G5						✓							300,000	279,756	20,245	300,000	280,000	-	-	-	-	05/14/19A	08/09/19					
Southwood ES	22-Yr	SS	N0065.0	Int	G5		✓				✓	✓	✓					833,000	602,990	230,010	833,000	456,373	-	-	(95,000)	1	04/09/19A	07/03/19					
Stone Lakes ES	13-Yr	NE	N0143.6	Sm	G4						✓							275,000	249,917	25,083	275,000	249,007	-	-	-	-	03/20/19A	07/17/19					
Timber Creek HS	20-Yr	NE	N0037.2	Lg	G3		✓		✓	✓	✓			✓	✓		✓	16,958,000	16,512,315	445,685	16,958,000	13,982,080	49,995	2	(2,625,953)	1	07/05/18A	08/30/19					
Timber Creek HS	20-Yr	NE	N0143.15	Sm	G3						✓							275,000	163,611	111,389	275,000	250,000	-	-	-	-	04/26/19A	09/22/19					
Wekiva HS	12-Yr	NW	N0143.20	Int	G4						✓							413,403	393,717	19,686	413,403	393,717	-	-	-	-	05/30/19A	09/26/19					
West Oaks ES	15-Yr	NW	N0143.7	Sm	G4						✓							275,000	261,447	13,553	275,000	260,399	-	-	-	-	03/20/19A	07/17/19					
West Oaks ES	15-Yr	NW	N0143.16	Sm	G4		✓											275,000	52,231	222,769	275,000	250,000	-	-	-	-	04/22/19A	08/02/19					
Windermere ES	13-Yr	NW	N0143.8	Sm	G4						✓							281,500	263,046	18,454	281,500	261,998	-	-	-	-	04/16/19A	08/09/19					
Winter Park HS	14-Yr	NE	N0098.0	Int	G3						✓							500,000	445,993	54,007	500,000	419,193	-	-	-	-	03/28/19A	07/24/19					
SUBTOTAL - CONSTRUCTION																		29 Projects	115,490,113	100,225,523	15,264,590	115,490,113	89,945,955	(347,732)	5	(11,808,555)	14						
CLOSE-OUT																																	
Chain of Lakes MS	21-Yr	NW	N0076.0	Int	G3					✓	✓	✓						1,761,000	1,676,219	84,781	1,761,000	1,501,038	12,335	1	(163,083)	1	03/07/18A	12/12/18A	08/20/19				
Citrus ES	20-Yr	NW	N0057.0	Int	G3		✓		✓	✓	✓							1,715,000	1,631,545	83,456	1,715,000	1,104,954	-	-	(119,066)	2	04/13/18A	08/13/18A	08/06/19				
Citrus ES	20-Yr	NW	N0057.2	Int	G3													496,000	314,325	181,675	496,000	-	-	-	-	01/10/19A	01/25/19A	06/24/19					
Colonial HS	21-Yr	NE	N0035.1	Int	G3		✓				✓	✓	✓	✓				1,998,000	1,855,953	142,048	1,998,000	1,568,497	233,110	2	(258,600)	1	03/20/18A	02/08/19A	08/06/19				
College Park MS	11-Yr	NE	N0075.0	Int	G5		✓	✓	✓	✓	✓	✓	✓	✓				1,654,000	1,544,046	109,953	1,654,000	1,516,475	(85,701)	1	(322,800)	1	01/18/18A	08/07/18A	08/06/19				
Jackson MS	16-Yr	NE	N0077.0	Int	G4		✓		✓	✓	✓	✓	✓	✓				1,476,000	1,318,465	157,535	1,476,000	1,087,070	-	-	(34,336)	2	10/03/17A	01/29/18A	08/06/19				
Jones HS	15-Yr	SS	D0103.1	Lg	G3		✓											3,014,000	2,848,850	165,150	3,014,000	2,532,775	247,835	3	-	-	05/24/16A	08/14/17A	08/06/19				
Lake Nona HS	10-Yr	SS	N0143.2	Sm	G5						✓							163,000	155,570	7,430	163,000	155,570	-	-	-	-	01/08/19A	05/31/19A	07/30/19				
Lake Nona HS	10-Yr	SS	N0143.3	Sm	G5						✓							199,000	189,452	9,548	199,000	189,452	-	-	-	-	01/08/19A	05/31/19A	07/30/19				
Lakeview MS	24-Yr	NW	N0041.2	Int	G3		✓			✓	✓	✓						963,000	850,757	112,244	963,000	718,185	-	-	(37,770)	1	05/19/17A	10/11/17A	08/06/19				
Lawton Chiles ES	20-Yr	NE	N0060.1	Int	G3						✓	✓	✓					410,000	363,718	46,283	410,000	-	-	-	-	10/22/18A	11/09/18A	06/25/19					
Liberty MS	14-Yr	NE	N0022.0	Lg	G4		✓	✓	✓	✓	✓	✓	✓	✓				9,055,000	8,420,635	634,365	9,055,000	7,401,231	172,749	8	(1,263,495)	2	02/09/16A	02/19/18A	08/06/19				
Oakshire ES	20-Yr	SS	N0061.1	Int	G3													496,000	402,505	93,495	496,000	-	-	-	-	01/28/19A	04/15/19A	08/13/19					
Odyssey MS	19-Yr	NE	N0067.1	Int	G3		✓	✓	✓	✓	✓	✓						2,181,000	1,997,481	183,519	2,181,000	1,965,969	-	-	(703,648)	1	06/06/17A	11/30/17A	08/06/19				
Ridgewood Park ES	13-Yr	NW	N0063.2	Int	G4													410,000	355,667	54,334	410,000	-	-	-	-	09/17/18A	09/28/18A	06/25/19					
Riverdale ES	21-Yr	NE	N0064.1	Int	G5													410,000	337,381	72,619	410,000	-	-	-	-	09/04/18A	09/21/18A	06/25/19					
Southwood ES	22-Yr	SS	N0065.1	Int	G5													410,000	315,104	94,896	410,000	-	-	-	-	12/21/18A	01/10/19A	06/25/19					
Winter Park HS	14-Yr	NE	N0066.2	Int	G3		✓											1,628,000	1,501,131	126,869	1,628,000	1,220,671	-	-	-	-	06/30/17A	08/11/17A	10/22/19				
Wolf Lake ES	13-Yr	NW	N0085.0	Int	G4						✓							1,104,000	984,961	119,038	1,104,000	881,746	-	-	(203,095)	2	12/06/17A	05/02/18A	08/06/19				
SUBTOTAL - CLOSE-OUT																		19 Projects	29,543,001	27,063,764	2,479,236	29,543,001	21,843,632	580,328	15	(3,105,893)	13						
PREVIOUSLY COMPLETE																		137 Projects	44,316,895	44,316,895	-	44,316,895	36,211,563	1,139,130	28								

Capital Renewal Update – June 20, 2019

There are 53 active projects (22 large, 17 intermediate, 14 small) currently in progress for improvements at 44 sites, with an estimated total cost of \$204.6M and construction cost of \$156.9M. The total number and cost of projects is unchanged since the last report.

There are 12 projects currently being planned, which is a decrease of one since the last report. Planning commenced on a new intermediate digital curriculum project at Pinewood Elementary School. A large campus-wide project at Colonial 9th Grade Center moved to the design phase, and construction commenced on a chiller replacement at Riverdale Elementary School since the last report.

Several projects currently being planned will commence their design phase in the near future. We've concluded scope identification and are currently negotiating design agreements for several projects including the next phase of the Colonial High School project; a heating, ventilating and air conditioning (HVAC) improvements project at Wolf Lake Middle School; and a project addressing combined, similar building envelope and HVAC requirements at Lakeville and Riverdale Elementary Schools. Scope development continues on the remaining projects in planning.

12 projects are currently in the design phase, which is unchanged since the last report. As noted previously, the Colonial 9th Grade Center project commenced design since the last report, while the Castle Creek Elementary School chiller replacement moved to construction. Of the remaining projects in design, several are scheduled to commence construction later this summer. These include projects addressing campus-wide requirements at Ocoee Middle School; building envelope and intercom system issues at Citrus Elementary School; softball field drainage renovations at Boone High School; a roof and rooftop HVAC equipment replacement project at Acceleration East; and a campus-wide project at Jones High School. With the exception of the Ridgewood Park Elementary School paving project, the Bonneville Elementary School HVAC and building envelope project and the Colonial 9th Grade Center campus-wide project which are scheduled for construction commencement in 2020, the remaining projects in design will commence later this year.

29 projects are currently under construction, which is an increase of one since the last report. Projects commencing construction since the last report include small chiller replacements at Riverdale, Castle Creek and Catalina Elementary Schools, and an intermediate chiller replacement at Wekiva High School. Chiller renewal projects at Memorial Middle School and Lake Nona High School were completed since the last report.

The 29 projects under construction include 10 large, 7 intermediate and 12 small projects, with an estimated total cost of \$115.5M and construction cost of \$89.9M. These include three campus-wide high school projects at Boone, Olympia and Timber Creek High Schools that exceed \$10M in construction costs.

Except for the Olympia High School and Gotha Middle School projects which are scheduled for completion early in 2020, all projects currently under construction will be completed later in 2019.

The large and intermediate projects scheduled to commence later in 2019 represent an additional \$27.5M of anticipated construction contract awards for calendar year 2019. The detailed report reflects only minor changes in the forecasted balance of unused capital renewal funds through the end of FY 2020, with \$91.3M available for new requirements.

Capital Renewal Update as of June 20, 2019 Changes since 5/16/19

Planning

- New Project
 - o Pinewood ES – N0095.1 Digital Curriculum (Cohort 7)
- Moved to Design
 - o Colonial 9GC – N0058.0 Campus-Wide
- Moved to Construction
 - o Riverdale ES – N0143.13 Chiller Replacement

Design

- Moved from Planning
 - o Colonial 9GC – N0058.0 Campus-Wide
- Moved to Construction
 - o Castle Creek ES – N0143.10 Chiller Replacement

Construction

- New Project
 - o Catalina ES – N0143.19 Chiller Replacement
 - o Wekiva HS – N0143.20 Chiller Renewal
- Moved from Planning
 - o Riverdale ES – N0143.13 Chiller Replacement
- Moved from Design
 - o Castle Creek ES – N0143.10 Chiller Replacement
- Moved to Close-out
 - o Lake Nona HS – N0143.2 Chiller #1 Renewal
 - o Lake Nona HS – N0143.3 Chiller #2 Renewal
- Moved to Complete
 - o Memorial MS – N0143.4 Chiller Renewal

Close-out

- Moved from Construction
 - o Lake Nona HS – N0143.2 Chiller #1 Renewal
 - o Lake Nona HS – N0143.3 Chiller #2 Renewal

Capital Renewal Update as of June 20, 2019

Capital Renewal: Capital Renewal is the replacement of major systems and components needed to preserve the efficient operation of school facilities. Capital Renewal funds are intended for Groups G3, G4, G5, and G6 school facilities, and Project Elements greater than \$50,000 in Priorities P1, P2, and P3 (and incidental P4 or P5 Elements).

Project Elements

Site	Exterior	Electrical	Technology
Roofing	Interior	Plumbing	Conveyances
Structural	Mechanical	Life Safety	Specialties

Maintenance Areas

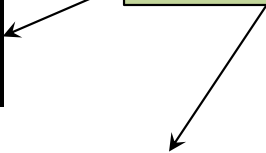
- NE - Northeast Maintenance Area
- NW - Northwest Maintenance Area
- SS - Super South Maintenance Area

Facilities Inventory - Group Structure

- G1 - balance of 2003 Sales Tax List, funded through FY16
- G2 - balance of 2003 Sales Tax List, funded FY17 - FY22

G3 - pre-2003 Sales Tax facilities; funded FY23 - FY26 G4 - facilities constructed or renovated 2003 to 2008 G5 - facilities constructed or renovated 2008 to 2013 G6 - facilities constructed or renovated 2013 to 2018

Eligible for CR funding



Funding Priorities

Priority P1: Life Safety, Roofing, Air Conditioning, Security Priority P2: Exterior Doors/Windows, Elevators, Plumbing, Electrical Power, Technology, Perimeter Fencing / Gates, Interior Lighting Priority P3: Interior Partitions / Doors / Windows, Ceilings, Exterior Lighting, Exterior Finishes, Voice Communications, Paving (Roads, Walks, Parking)

- Priority P4: Interior Specialties, Playground Equipment
- Priority P5: Interior Finishes, Landscaping, Athletic Facilities

Abbreviations

9GC - 9th Grade Center; Grade 9 A - Actual (related to a date) Age (Wt'd) - weighted age of a campus Alt Ed - Alternative Education Bldg - Building CEP-E; Community Education Partners (Alt Ed) CEP-W; Community Education Partners (Alt Ed) CR - Capital Renewal Dr H'wre - Door Hardware Elec - Electrical ES - Elementary School; Grades PreK - 5 Est. - Estimated FY - Fiscal Year; July 1 through June 30 Gp - Group; organization of campus-wide facilities HS - High School; Grades 9 - 12 HVAC - Heating, Ventilating and Air Conditioning Int - Intermediate CR Project; \$280K to \$2M	K - Thousands (number); Kindergarten (school) K8 - Grades K - 8 Lg - Large CR Project; over \$2M M - Millions Maint. Area - Maintenance Area MEP - Mechanical, Electrical and Plumbing MS - Middle School; Grades 6 - 8 NTP - Notice to Proceed ODP - Owner Direct Purchase R'newal - renewal of chiller SC - Substantial Completion Sm - Small CR Project; under \$280K Subst. Compl. - Substantial Completion TBD - To Be Determined Tech - Technology VFD - Variable Frequency Drive Yr - Year
---	---

Capital Renewal Update as of June 20, 2019
Active Projects With Construction Cost Exceeding \$10M

Boone High School Campus-wide Capital Renewal Project

Guaranteed Maximum Price: \$17,189,003

Campus-Wide Renovations (excluding auditorium, gymnasium/cafeteria)

- Complete roof replacement, all buildings
- Roof drain replacement in conjunction with roof replacement
- New lightning protection system
- Fire alarm system replacement
- Security camera system replacement
- Security camera system expansion (alternate funding)
- Replacement of the campus intercom system
- Re-keying all interior and exterior doors
- Upgrade of the existing Building Automation System (BAS) to support central monitoring

Classroom Buildings (100, 200, 300)

- Repair of CMU cracks, replacement of window and door sealants, and exterior wall painting
- Repair of damaged stucco soffit
- Replacement of exterior site lighting
- Replacement of exterior stairs (Building 100 only)
- Renovation of group restrooms with new fixtures, partitions and finishes
- Revision of restroom floor plans to meet accessibility requirements in conjunction with renovation
- Replacement of domestic water and wastewater piping
- Replacement of the building heating, ventilating and air conditioning (HVAC) system
- Conversion of the HVAC system to central station air handling units (AHU) in conjunction with replacement, with new mechanical rooms, ductwork, fans, VAV boxes, AHUs, piping
- Conversion from hot water to electric heat in conjunction with HVAC system replacement
- Replacement of acoustical ceilings to facilitate HVAC system conversion to AHU system
- Replacement of light fixtures with new LED panels in conjunction with ceiling replacement
- Fire sprinkler system modifications to facilitate HVAC system conversion to AHU system
- Replacement of cooling towers, condenser and chilled water pumps, boilers and condenser water treatment at the Central Energy Plant (CEP)

Other Buildings

- Replacement of the HVAC chiller and pumps serving the Field House

Capital Renewal Update as of June 20, 2019
Active Projects With Construction Cost Exceeding \$10M

Timber Creek High School Campus-wide Capital Renewal Project

Guaranteed Maximum Price: \$13,982,080

Building Envelope Renovations

- Complete roof replacement, all buildings
- Roof drain replacement in conjunction with roof replacement
- New lightning protection system
- Wall crack repairs at the Central Energy Plant (CEP)

Heating, Ventilating and Air Conditioning (HVAC) Renovations

- Replacement of all air-handling units (AHUs), campus-wide (47 AHUs)
- Addition of bi-polar ionization to select AHUs in conjunction with AHU replacement
- Replacement of HVAC duct work within mechanical rooms
- Replacement of all rooftop mechanical equipment (exhaust fans, air intakes)
- Variable frequency drive (VFD) replacements for AHUs and pumps
- Replacement of heating hot water piping and valves, campus-wide
- Replacement of cooling towers, condenser and chilled water pumps, boilers, condenser water piping and condenser water treatment at the Central Energy Plant (CEP)
- Replacement of the existing building automation system (BAS), campus-wide
- Rebalancing of all HVAC systems

Low-voltage System Improvements

- Replacement of the campus intercom system
- Replacement of the gymnasium sound system
- Replacement of the cafeteria sound reinforcement system

Safety and Security

- Fire alarm system replacement
- Intrusion detection system replacement
- Security camera system replacement
- Security camera system expansion (alternate funding)

Capital Renewal Update as of June 20, 2019
Active Projects With Construction Cost Exceeding \$10M

Olympia High School Campus-wide Capital Renewal Project

Guaranteed Maximum Price: \$13,232,880

Building Envelope Renovations

- Complete roof replacement (2 buildings) or new roof membrane (8 buildings), campus-wide
- Roof drain repair or replacement in conjunction with roof replacement
- New lightning protection system
- Sealant replacement at all sidewalk to wall transitions
- Sealant replacement at all tilt wall panel joints
- Wall crack and concrete spalling repairs at building 1100 and the cooling tower yard

Heating, Ventilating and Air Conditioning (HVAC) Renovations

- Replacement of all air-handling units (AHUs), campus-wide (49 AHUs)
- Addition of bi-polar ionization to select AHUs in conjunction with AHU replacement
- Replacement of HVAC duct work within mechanical rooms
- Variable frequency drive (VFD) replacements for AHUs and pumps
- Replacement of heating hot water piping and valves, campus-wide
- Replacement of cooling towers, condenser and chilled water pumps, boilers, condenser water piping and condenser water treatment at the Central Energy Plant (CEP)
- Replacement of the existing building automation system (BAS), campus-wide
- Rebalancing of all HVAC systems

Low-voltage System Improvements

- Replacement of the campus intercom system
- Replacement of the gymnasium sound system

Safety and Security

- Fire alarm system replacement
- Security camera system replacement
- Security camera system expansion (alternate funding)

Capital Renewal Forecast

Reporting Period: May 2019 - Apr 2021

