



### Guests:

Kathryn Strouse, Administrative Director  
**Middle Bucks Institute of Technology**

Robert Vining, Business Manager  
**Middle Bucks Institute of Technology**

Chris Bamber, Sr. Managing Consultant  
**PFM**

# Joint Financing-Facilities Committee Meeting

## Capital Improvements Planning and 5-Year Projection Model Presentation

November 7, 2019

# **AGENDA**

## **Middle Bucks Institute of Technology:**

- Capital Needs Assessment and Funding Plan
- Board Response – Public Comments



## **Facilities Committee Items:**

### **Facilities Improvements Planning Update**

- Hillcrest and Richboro Elementary School

### **Capital Projects Update**

- Overview of 2020-2024 CIP 5-Year Plans (version v.8)
- CIP Budget Formula and 5-Year Budget Analysis

### **Consent/Board Agenda Items**

- Approval of Professional Services for HCES and RES Projects

# **AGENDA**

## **Facilities Committee Items (continued):**

### **Upcoming Meetings**

- Act 34 Hearing for CR STAR Center
- Land Development and FACCOM Meetings

## **Finance Committee Items:**

- Board Approval items
- 5-Year Projection Model Presentation

### **Public Comments**

# Middle Bucks Institute of Technology

## Guests:

**Kathryn Strouse**, Administrative Director


**Robert Vining**, Business Manager



1. Capital Needs Assessment and Funding Plan
2. Welding Lab Expansion
3. Other







# Middle Bucks Institute of Technology

Capital Needs Assessment Report  
November 2019

# 1998 Renovation

- Culinary lab
- Restaurant built



## 2006 Renovation

- Classrooms/Labs renovated
- Electrical Systems; Lutron controlled lighting
- HVAC units
- Siemens environmental system
- Conversion to municipal water system
- Asbestos abatement
- ADA compliance; ramps, chairlift

# Capital Needs Assessment

- **Conducted August 2019 by Bustamante Engineers Inc.**
  - Roof
  - HVAC Units
  - Asphalt
  - Concrete
  - Stone walls
  - Lintels

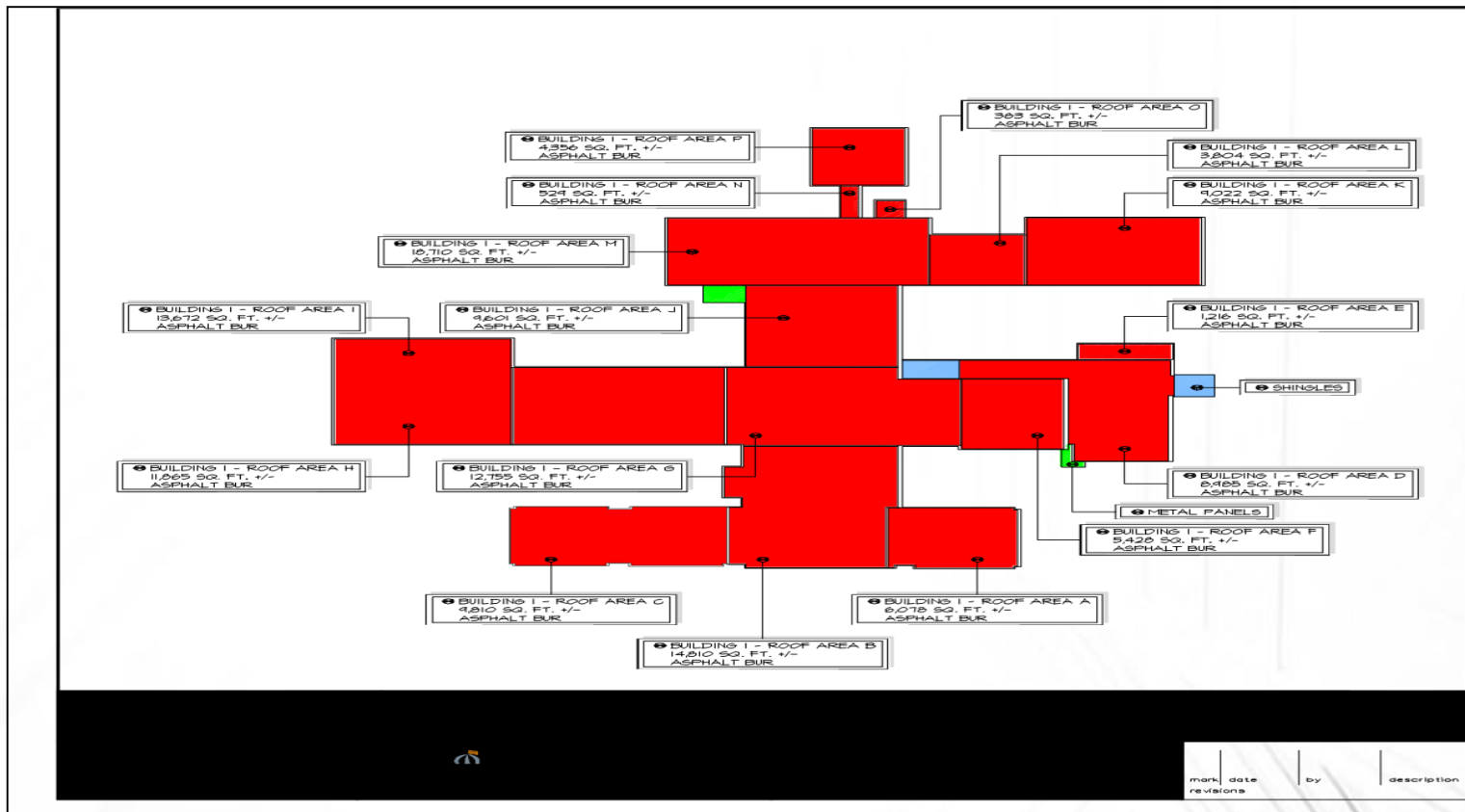




## Roof – Overview



# Engineering Study that shows failing condition of the roof









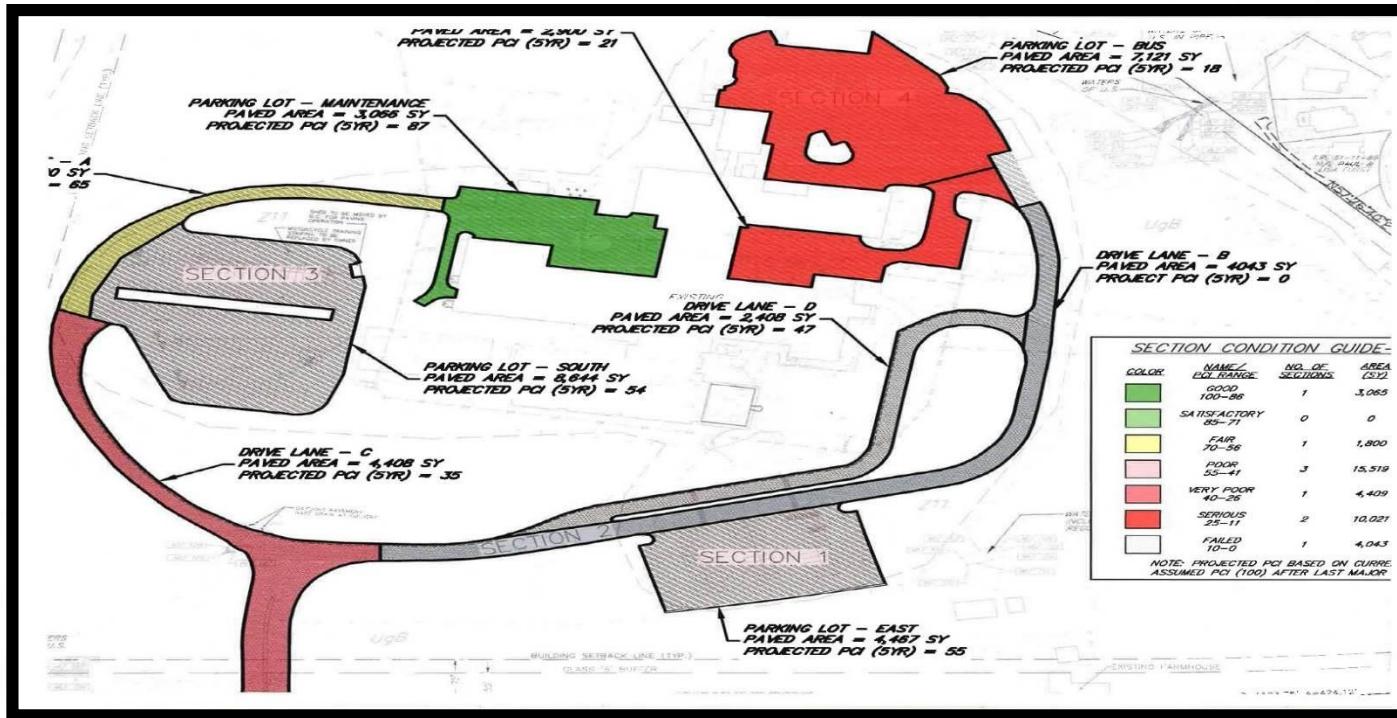




# HVAC Units



# Engineering study shows condition of asphalt



## Asphalt – Back Parking Lot





# Asphalt – Bus Parking Lot



## Asphalt – Driveway





## Asphalt – Automotive Area



## Concrete – North Plaza

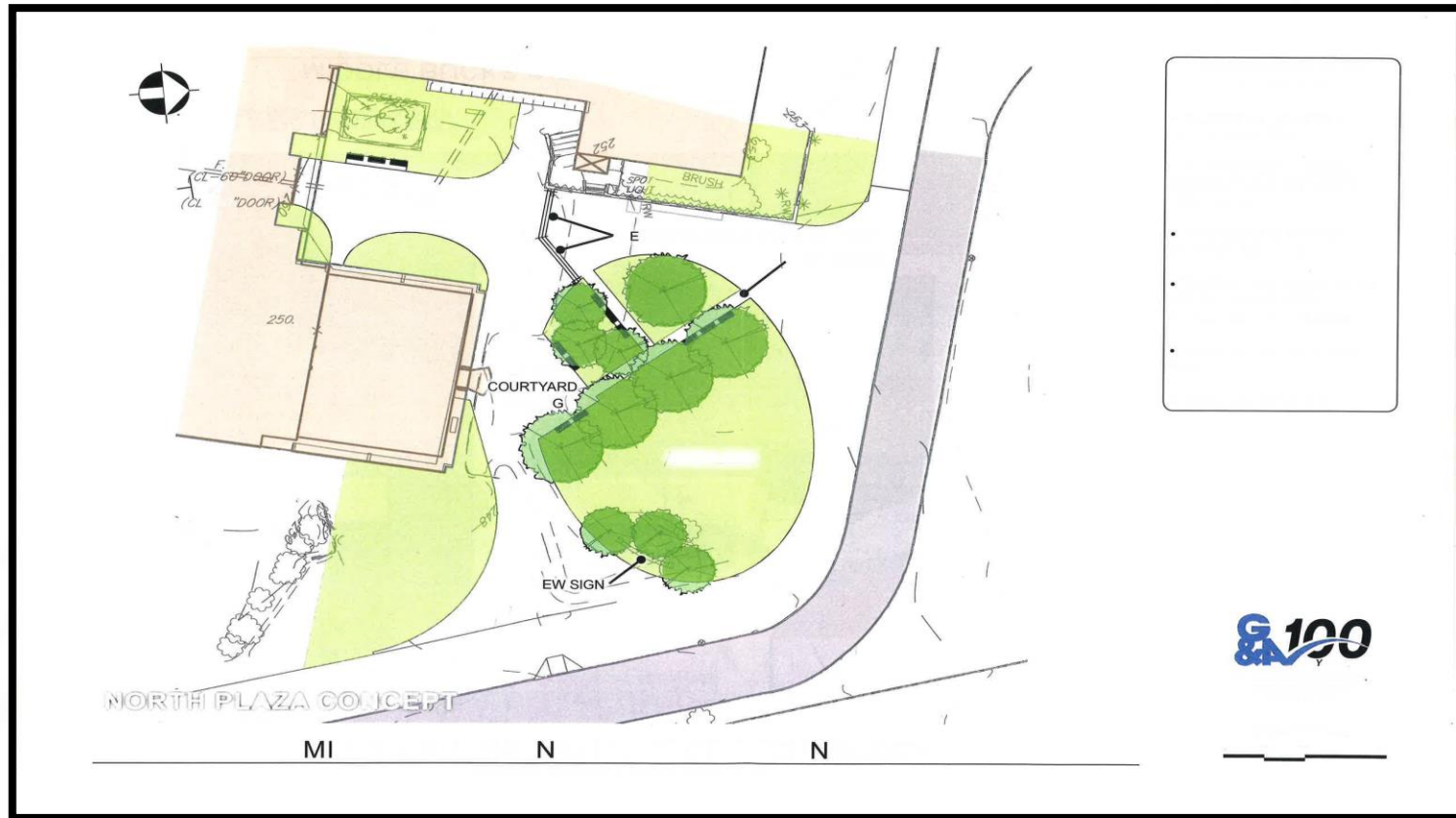




## Concrete – North Plaza



# Concrete – North Plaza



## Concrete – North Plaza

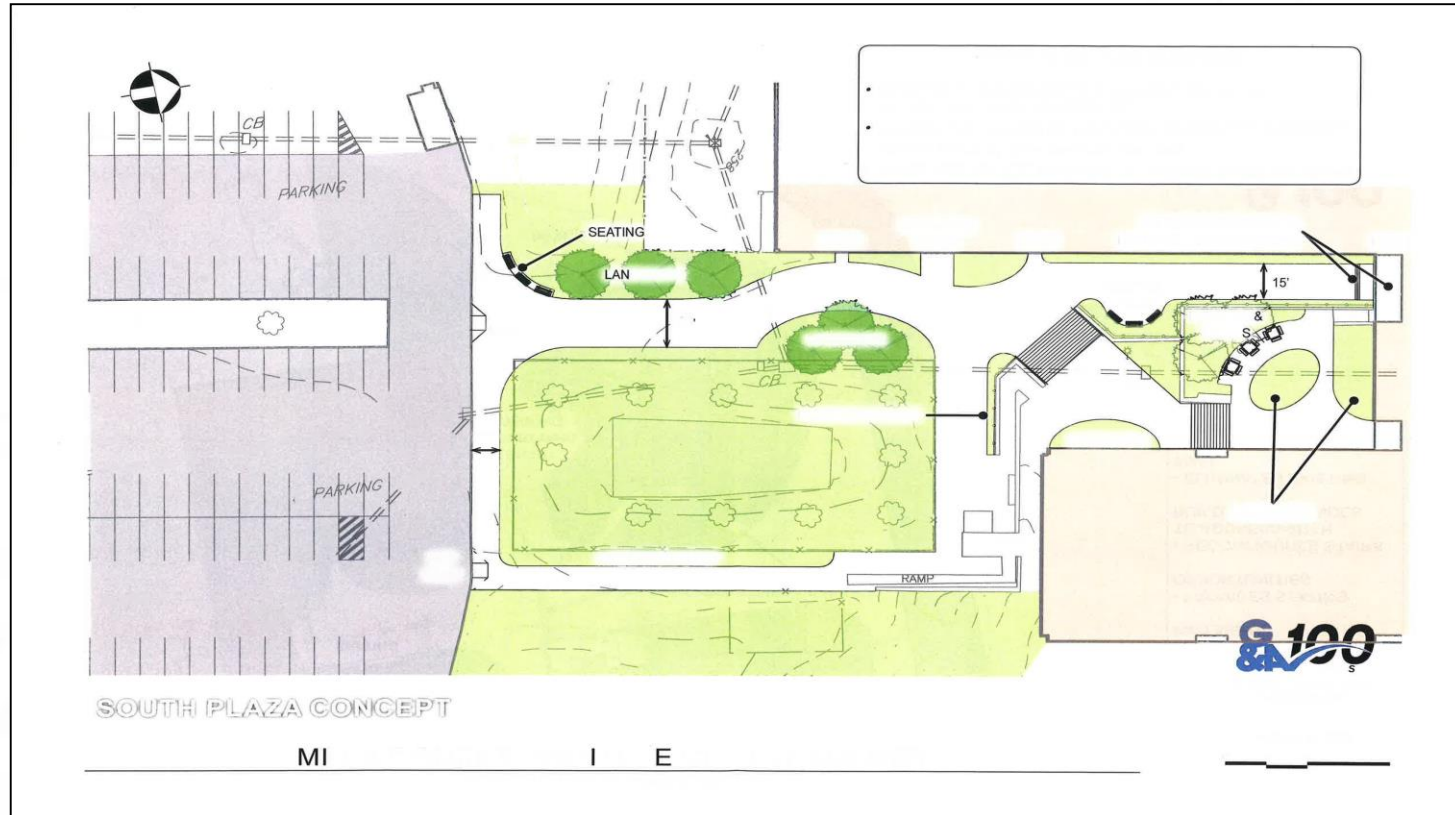
- Remove existing retaining wall
- Eliminates 6,800 sq. feet of existing concrete
- Reconfigures stairs to address both entrances
- New entry sign



## Concrete – South Plaza



# Concrete – South Plaza



## Concrete – South Plaza

- Improve ADA access
- Eliminates 3,000 sq. foot of existing concrete
- Improves pedestrian safety along existing walls



# Retaining Walls – Repoint Stone



## Lintels – Front Entrance of MBIT





# Lintels



# Lintels



# Lintels





# Welding Lab



# Welding Lab



Architectural floor plan of the Westing Extension at Middle Bucks Institute of Technology. The plan shows a large central Workshop area, a Classroom, a Locker Room, a Bathroom, a Storage room, a Material Closet, a Material Room, a Fab. Room, and a Courtyard. Dimensions are provided for various rooms and overall sections. A note indicates a 'Change Door To Be Removed' in the Material Room. A title block on the right contains project information and a scale of 1/4" = 1'.

Room Labels:

- Courtyard
- Fab. Room
- Material Room
- Material Closet
- Locker Room
- Bathroom
- Storage
- Workshop
- Classroom
- Clset

Dimensions (in feet):

- Overall width: 42' 0"
- Overall depth: 42' 0"
- Workshop width: 32' 0"
- Workshop depth: 24' 0"
- Classroom width: 24' 0"
- Classroom depth: 24' 0"
- Locker Room width: 12' 0"
- Locker Room depth: 12' 0"
- Bathroom width: 6' 0"
- Bathroom depth: 6' 0"
- Storage width: 6' 0"
- Storage depth: 6' 0"
- Material Closet width: 6' 0"
- Material Closet depth: 6' 0"
- Material Room width: 12' 0"
- Material Room depth: 12' 0"
- Fab. Room width: 24' 0"
- Fab. Room depth: 24' 0"

Note: Change Door To Be Removed

Scale: 1/4" = 1'

Project Information:

No.	Revisions/Notes	Date
1	Revised	1/25/19

Project Name: Westing Extension  
 Client: Middle Bucks Institute of Technology  
 Date: February 25, 2019  
 Scale: 1/4" = 1'

Sheet Number: A1



# QUESTIONS:



# Facilities Improvements Projects

## Planning Update



# Facilities Improvements Planning

## Hillcrest and Richboro ES Renovations Projects:

1. As previously discussed at the April 2019 FACCOM and Board Meetings, the HCES and RES Project start date are planned for Nov/Dec 2019 and Nov/Dec 2020 in order to meet project completion dates of 2022 and 2023 respectively.
2. Proposals have been provided by Schradergroup Architects and D'Huy Engineering, Inc for the Architectural and Construction Management Services.
3. The approval of the noted services will be included on the 14NOV19 Board agenda. The fees are included in the project fees previously presented.
4. By documenting both projects concurrently the District will save approximately \$245,000 in professional fees. Since the bidding and construction phases will be staggered one year apart, no savings will be realized for the bid and construction administration phases. The fees also consider site investigative phase work previously performed at both schools.



# Facilities Improvements Planning

## Hillcrest and Richboro ES Renovations Projects:

The fee savings are as follows:

### Pre-Design Phase

SchraderGroup (\$ 32,659)

### Schematic Design Phase

SchraderGroup (\$ 61,235)

### Design Development Phase

SchraderGroup (\$ 81,647)

D'Huy Engineering, Inc. (\$ 11,000)

### Construction Document Phase

SchraderGroup (\$ 48,988)

D'Huy Engineering, Inc. (\$ 11,000)

**TOTAL SAVINGS (\$246,529)**

The A/E Fee Percentages are as follows:

**HCES Project: 5.63%**

**RES Project: 3.63%**

**GRAND TOTAL FEE %: 4.63%**

Lump Sum Fees based on  
\$16,329,300 Construction Costs or  
Total Est. Const. Cost of \$32,658,600:

**HCES Project SGA \$ 918,665**

**HCES Project D'Huy \$ 496,000**

**RES Project SGA \$ 709,338**

**RES Project D'Huy \$ 487,000**

**GRAND TOTAL FEE \$: \$ 2,611,003**

# Hillcrest and Richboro Elementary School Renovations Projects

## Preliminary Project Schedule



Task	Building	Start Date	Completion Date
Pre-Design Phase	HCES and RES	November 2019	January 2020
Schematic Design Phase	HCES and RES	February 2020	April 2020
Design Development	HCES and RES	May 2020	August 2020
Construction Documents	HES and RES	September 2020	December 2020
Procurement Phase	HCES	January 2021	February 2021
Construction Phase	HCES	June 2021	July 2022
Procurement Phase	RES	November 2021	February 2022
Construction Phase	RES	June 2022	July 2023

# **Overview of 2020-2024 CIP 5-Year Plan (version v.8)**

**(See 10OCT19 FACCOM Meeting for full presentation)**





FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS PROJECT SUMMARY OF PROJECTS AND FINANCES								
10-Oct-19								
ITEM #	SCHOOL ID	EXPENSES AND FINANCING	PRIORITY	2019-20 (Summer 2020)	2020-2021 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)
	CONSTRUCTION PROJECTS & EXPENSES							
1.1	CES	Add exterior site lighting to select areas to improve security	1 2020	\$ 18,432	\$ 19,354	\$ 20,321	\$ 21,337	\$ 22,404
1.2	CRHSN	Turf replacement at Walt Snyder Stadium	1 2020	\$ 843,648	\$ 885,830	\$ 930,122	\$ 976,628	\$ 1,025,459
1.3	CRHSN	Resurface synthetic track and re-line	1 2020	\$ 329,109	\$ 345,564	\$ 362,843	\$ 380,985	\$ 400,034
1.4	CRHSN	Pave 'D' areas of track when resurfacing	1 2020	\$ 197,466	\$ 207,339	\$ 217,706	\$ 228,592	\$ 240,021
1.5	CRHSN	Add guardrail at edge of paving adjacent to natatorium to prevent vehicles from accessing fields (Include gated access)	1 2020	\$ 40,000	\$ 42,000	\$ 44,100	\$ 46,305	\$ 48,620
1.6	CRHSN	Engage Engineer to study building stormwater collection system. (Study and Report Allowance)	1 2020	\$ 50,000	\$ 52,500	\$ 55,125	\$ 57,881	\$ 60,775
1.7	CRHSS	Replace failed insulated glazing units at Gym Links and Library	1 2020	\$ 30,673	\$ 32,207	\$ 33,817	\$ 35,508	\$ 37,283
1.8	CRHSS	Remove and replace existing tennis and basketball courts	1 2020	\$ 1,500,000	\$ 1,575,000	\$ 1,653,750	\$ 1,736,438	\$ 1,823,259
1.9	HCES	Replace intercom head end system	1 2020	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233
1.10	MMWES	Replace intercom head end system	1 2020	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233
1.11	NES	Replace intercom head end system	1 2020	\$ 19,000	\$ 19,950	\$ 20,948	\$ 21,995	\$ 23,095
1.12	RMS	Replace intercom head end system	1 2020	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233
1.13	ALL	Unplanned/Unforeseen projects	1 2020	\$ 75,000				
a	TOTAL CONSTRUCTION PROJECT EXPENSES			\$ 3,148,328	\$ 5,216,475	\$ 3,497,915	\$ 3,921,930	\$ 3,093,317
	DEFERRED PROJECT COSTS (Included in Total Project Expenses Above)			\$ -	\$ 645,933	\$ 1,174,729	\$ 3,127,869	\$ 1,128,205
	SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)							
b	A/E Fees, Permits, Contingencies (30%)			\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995
c	Design Contingency (5%)			\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666
d	TOTAL SOFT COSTS			\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661
e	TOTAL PROJECT COST (EXCLUDING FINANCING)			\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS PROJECTION - SUMMARY OF PROJECTS AND FINANCES								
	10-Oct-19							
ITEM #	SCHOOL ID	EXPENSES AND FINANCING	PRIORITY	2019-20 (Summer 2020)	2020-2021 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)
	CONSTRUCTION PROJECTS & EXPENSES							
2.1	CC	Add foundation drainage	1 2021	\$ 928,200	\$ 974,610	\$ 1,023,341	\$ 1,074,508	\$ 1,128,233
2.2	CC	Repair concrete areaways	1 2021	\$ 327,600	\$ 343,980	\$ 361,179	\$ 379,238	\$ 398,200
2.3	CES	Mill and overlay asphalt sidewalk accessing Hill Avenue (east Side)	1 2021	\$ 5,678	\$ 5,962	\$ 6,260	\$ 6,573	\$ 6,902
2.4	CES	Parking lot maintenance	1 2021	\$ 100,394	\$ 105,414	\$ 110,684	\$ 116,219	\$ 122,030
2.5	CES	Reconfigure loading dock curb and paving repairs	1 2021	\$ 44,712	\$ 46,948	\$ 49,295	\$ 51,760	\$ 54,348
2.6	CRHSN	Parking lot maintenance	1 2021	\$ 183,072	\$ 192,226	\$ 201,837	\$ 211,929	\$ 222,525
2.7	CRHSN	Replace starting blocks in natatorium (total of 7)	1 2021	\$ 40,000	\$ 42,000	\$ 44,100	\$ 46,305	\$ 48,620
2.8	CRHSS	Parking lot maintenance	1 2021	\$ 176,030	\$ 184,832	\$ 194,073	\$ 203,777	\$ 213,966
2.9	MMWES	Parking lot maintenance	1 2021	\$ 150,000	\$ 157,500	\$ 165,375	\$ 173,644	\$ 182,326
2.10	NES	Roof replacement	1 2021	\$ 2,940,957	\$ 3,088,005	\$ 3,242,405	\$ 3,404,525	\$ 3,574,752
2.11	ALL	Unplanned/Unforeseen projects	1 2021		\$ 75,000			
a	TOTAL CONSTRUCTION PROJECT EXPENSES			\$ 3,148,328	\$ 5,216,475	\$ 3,497,915	\$ 3,921,930	\$ 3,093,317
	DEFERRED PROJECT COSTS (Included in Total Project Expenses Above)			\$ -	\$ 645,933	\$ 1,174,729	\$ 3,127,869	\$ 1,128,205
	SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)							
b	A/E Fees, Permits, Contingencies (30%)			\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995
c	Design Contingency (5%)			\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666
d	TOTAL SOFT COSTS			\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661
e	TOTAL PROJECT COST (EXCLUDING FINANCING)			\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978

Years 2 through 5 will be compounded automatically by the inflation factor in cell I5

FINAL		Version 4.0							
DRAFT						Inflation Factor (%)			5.00%

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS PROJECTION - SUMMARY OF PROJECTS AND FINANCES

			10-Oct-19						
ITEM #	SCHOOL ID	EXPENSES AND FINANCING	PRIORITY	2019-20 (Summer 2020)	2020-2021 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)	
		CONSTRUCTION PROJECTS & EXPENSES							
3.1	CC	Parking lot maintenance	1 2022	\$ 43,680	\$ 45,864	\$ 48,157	\$ 50,565	\$ 53,093	
3.2	CES	Add metal panels at cafeteria clerestory	1 2022	\$ 210,101	\$ 220,606	\$ 231,636	\$ 243,218	\$ 255,379	
3.3	CES	Paint Allowance (approx. 25% of interior)	2 2022	\$ 62,000	\$ 65,100	\$ 68,355	\$ 71,773	\$ 75,361	
3.4	CRHSN	Replace deteriorated lintels (Allowance)	1 2022	\$ 81,120	\$ 85,176	\$ 89,435	\$ 93,907	\$ 98,602	
3.5	CRHSN	Misc. concrete sidewalk repairs (Allowance)	1 2022	\$ 109,200	\$ 114,660	\$ 120,393	\$ 126,413	\$ 132,733	
3.6	CRHSN	Paint Allowance (approx. 25% of interior)	2 2022	\$ 250,000	\$ 262,500	\$ 275,625	\$ 289,406	\$ 303,877	
3.7	CRHSS	Misc. concrete sidewalk repairs (Allowance)	1 2022	\$ 165,375	\$ 173,644	\$ 182,326	\$ 191,442	\$ 201,014	
3.8	CRHSS	Provide safety netting at athletic fields	1 2022	\$ 40,000	\$ 42,000	\$ 44,100	\$ 46,305	\$ 48,620	
3.9	CRHSS	Replace auditorium sound system	2 2022	\$ 511,190	\$ 536,750	\$ 563,587	\$ 591,766	\$ 621,355	
3.10	CRHSS	Replace clocks throughout with new system	2 2022	\$ 383,394	\$ 402,564	\$ 422,692	\$ 443,826	\$ 466,018	
3.11	CRHSS	Replace stage lighting	1 2022	\$ 245,700	\$ 257,985	\$ 270,884	\$ 284,428	\$ 298,650	
3.12	GES	Parking lot maintenance	1 2022	\$ 118,110	\$ 124,016	\$ 130,216	\$ 136,727	\$ 143,563	
3.13	HES	Provide asphalt paving at stone parking lot adjacent to the YMCA	3 2022	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	
3.14	HES	Parking lot maintenance	1 2022	\$ 96,533	\$ 101,360	\$ 106,428	\$ 111,749	\$ 117,336	
3.15	MMWES	Upgrade fire alarm system	1 2022	\$ 257,312	\$ 270,178	\$ 283,686	\$ 297,871	\$ 312,764	
3.16	TFR	Roof replacement (3 buildings)	1 2022	\$ 515,970	\$ 541,769	\$ 568,857	\$ 597,300	\$ 627,165	
3.17	ALL	Unplanned/Unforeseen projects	1 2022			\$ 75,000			
a		TOTAL CONSTRUCTION PROJECT EXPENSES		\$ 3,148,328	\$ 5,216,475	\$ 3,497,915	\$ 3,921,930	\$ 3,093,317	
		DEFERRED PROJECT COSTS (Included in Total Project Expenses Above)		\$ -	\$ 645,933	\$ 1,174,729	\$ 3,127,869	\$ 1,128,205	
		SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)							
b		A/E Fees, Permits, Contingencies (30%)		\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995	
c		Design Contingency (5%)		\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666	
d		TOTAL SOFT COSTS		\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661	
e		TOTAL PROJECT COST (EXCLUDING FINANCING)		\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978	



TAB 31

COUNCIL ROCK SCHOOL DISTRICT

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS BUDGET PROJECTION (2020 - 2024)

Years 2 through 5 will be compounded automatically by the inflation factor in cell I5

FINAL DRAFT

Version 4.0

Inflation Factor (%)

5.00%

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS PROJECTION - SUMMARY OF PROJECTS AND FINANCES

10-Oct-19

ITEM #	SCHOOL ID	EXPENSES AND FINANCING	PRIORITY	2019-20 (Summer 2020)	2020-2021 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)
CONSTRUCTION PROJECTS & EXPENSES								
4.1	CC	Repair plaster soffits, ceilings, walls, etc.	1 2023	\$ 131,250	\$ 137,813	\$ 144,703	\$ 151,938	\$ 159,535
4.2	CC	Replace carpet in board room	2 2023	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	\$ 19,144
4.3	CC	Refinish wood floors at HCR1, HCR2 and hallway	1 2023	\$ 86,227	\$ 90,538	\$ 95,065	\$ 99,819	\$ 104,809
4.4	CES	Upgrade BMS controls to JCI	3 2023	\$ 68,141	\$ 71,548	\$ 75,125	\$ 78,882	\$ 82,826
4.5	CRHSN	Replace precast concrete honeycomb single glazed window systems	1 2023	\$ 2,554,971	\$ 2,682,720	\$ 2,816,856	\$ 2,957,698	\$ 3,105,583
4.6	CRHSN	Add dedicated boiler to support natatorium (will eliminate the need to operate a primary building boiler year round)	2 2023	\$ 56,784	\$ 59,623	\$ 62,604	\$ 65,735	\$ 69,021
4.7	CRHSS	Paint Allowance (approx. 25% of interior)	2 2023	\$ 275,000	\$ 288,750	\$ 303,188	\$ 318,347	\$ 334,264
4.8	CRHSS	Repair areas of failed terrazzo floors	1 2023	\$ 60,000	\$ 63,000	\$ 66,150	\$ 69,458	\$ 72,930
4.9	GES	Paint Allowance (approx. 25% of interior)	2 2023	\$ 75,000	\$ 78,750	\$ 82,688	\$ 86,822	\$ 91,163
4.10	ALL	Unplanned/Unforeseen projects	1 2023				\$ 75,000	
a	TOTAL CONSTRUCTION PROJECT EXPENSES			\$ 3,148,328	\$ 5,216,475	\$ 3,497,915	\$ 3,921,930	\$ 3,093,317
	DEFERRED PROJECT COSTS (Included in Total Project Expenses Above)			\$ -	\$ 645,933	\$ 1,174,729	\$ 3,127,869	\$ 1,128,205
SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)								
b	A/E Fees, Permits, Contingencies (30%)			\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995
c	Design Contingency (5%)			\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666
d	TOTAL SOFT COSTS			\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661
e	TOTAL PROJECT COST (EXCLUDING FINANCING)			\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978

TAB 31

COUNCIL ROCK SCHOOL DISTRICT

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS BUDGET PROJECTION (2020 - 2024)

Years 2 through 5 will be compounded automatically by the inflation factor in cell I5

FINAL DRAFT

Version 4.0

Inflation Factor (%)

5

FIVE YEAR CAPITAL IMPROVEMENTS PROJECTS PROJECTION - SUMMARY OF PROJECTS AND FINANCES




10-Oct-19

ITEM #	SCHOOL ID	EXPENSES AND FINANCING	PRIORITY	2019-20 (Summer 2020)	2020-2021 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)
CONSTRUCTION PROJECTS & EXPENSES								
5.1	CC	Add emergency generator & transfer switch	3 2024	\$ 212,996	\$ 223,646	\$ 234,828	\$ 246,569	\$ 258,898
5.2	CRHSN	Complete renovations of auditorium	2 2024	\$ 728,000	\$ 764,400	\$ 802,620	\$ 842,751	\$ 884,889
5.3	CRHSN	Replace roof areas L,P,R and V	1 2024	\$ 700,000	\$ 735,000	\$ 771,750	\$ 810,338	\$ 850,854
5.4	CRHSN	Upgrade kitchen equipment	1 2024	\$ 715,181	\$ 750,940	\$ 788,487	\$ 827,911	\$ 869,307
5.5	HES	Paint Allowance (approx. 25% of interior)	2 2024	\$ 54,000	\$ 56,700	\$ 59,535	\$ 62,512	\$ 65,637
5.6	MMWES	Paint Allowance (approx. 25% of interior)	2 2024	\$ 73,000	\$ 76,650	\$ 80,483	\$ 84,507	\$ 88,732
5.7	ALL	Unplanned/Unforeseen projects	1 2024					\$ 75,000
a	TOTAL CONSTRUCTION PROJECT EXPENSES			\$ 3,148,328	\$ 5,216,475	\$ 3,497,915	\$ 3,921,930	\$ 3,093,317
	DEFERRED PROJECT COSTS (Included in Total Project Expenses Above)			\$ -	\$ 645,933	\$ 1,174,729	\$ 3,127,869	\$ 1,128,205
SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)								
b	A/E Fees, Permits, Contingencies (30%)			\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995
c	Design Contingency (5%)			\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666
d	TOTAL SOFT COSTS			\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661
e	TOTAL PROJECT COST (EXCLUDING FINANCING)			\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978

SOFT COSTS (PROFESSIONAL FEES & CONTINGENCIES)							
b	A/E Fees, Permits, Contingencies (30%)		\$ 944,498	\$ 1,564,943	\$ 1,049,375	\$ 1,176,579	\$ 927,995
c	Design Contingency (5%)		\$ 157,416	\$ 260,824	\$ 174,896	\$ 196,097	\$ 154,666
d	TOTAL SOFT COSTS		\$ 1,101,915	\$ 1,825,766	\$ 1,224,270	\$ 1,372,676	\$ 1,082,661
e	TOTAL PROJECT COST (EXCLUDING FINANCING)	Project Costs (Annually)	\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978
FIVE YEAR TOTAL COST							
f						Total Project Costs (5-Years)	\$ 25,485,254
BUDGET BY PRIORITY							
The priority rankings are shown for break-out purposes only and are not intended to support deferring any work.		Priority Ranking	2019-20 (Summer 2020)	2020-21 (Summer 2021)	2021-22 (Summer 2022)	2022-23 (Summer 2023)	2023-24 (Summer 2024)
a1	Includes All Priority 1 Items and \$75,000 Allowance for Unplanned Projects	1	\$ 3,148,328	\$ 5,216,475	\$ 2,151,119	\$ 3,353,913	\$ 1,795,161
a2	Includes All Priority 2 Items Only	2	\$ -	\$ -	\$ 1,330,259	\$ 489,136	\$ 1,039,258
a3	Includes All Priority 3 Items Only	3	\$ -	\$ -	\$ 16,538	\$ 78,882	\$ 258,898



	<b>P R I O R I T Y 1 - SOFT COSTS (PROFESSIONAL FEES &amp; CONTINGENCIES)</b>						
b1	A/E Fees, Permits, Contingencies (30%)	944,498	1,564,943	645,336	1,006,174	538,548	
c1	Design Contingency (5%)	157,416	260,824	107,556	167,696	89,758	
d1	<b>TOTAL SOFT COSTS</b>	<b>1,101,915</b>	<b>1,825,766</b>	<b>752,892</b>	<b>1,173,869</b>	<b>628,306</b>	
e1	<b>PRIORITY 1 - TOTAL PROJECT COST (EXCLUDING FINANCING)</b>	<b>4,250,243</b>	<b>7,042,241</b>	<b>2,904,010</b>	<b>4,527,782</b>	<b>2,423,468</b>	
	<b>P R I O R I T Y 2 - SOFT COSTS (PROFESSIONAL FEES &amp; CONTINGENCIES)</b>						
b2	A/E Fees, Permits, Contingencies (30%)	\$ -	\$ -	\$ 399,078	\$ 146,741	\$ 311,777	
c2	Design Contingency (5%)	\$ -	\$ -	\$ 66,513	\$ 24,457	\$ 51,963	
d2	<b>TOTAL SOFT COSTS</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 465,591</b>	<b>\$ 171,198</b>	<b>\$ 363,740</b>	
e2	<b>PRIORITY 2 - TOTAL PROJECT COST (EXCLUDING FINANCING)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,795,849</b>	<b>\$ 660,333</b>	<b>\$ 1,402,998</b>	
	<b>P R I O R I T Y 3 - SOFT COSTS (PROFESSIONAL FEES &amp; CONTINGENCIES)</b>						
b3	A/E Fees, Permits, Contingencies (30%)	\$ -	\$ -	\$ 4,961	\$ 23,665	\$ 77,669	
c3	Design Contingency (5%)	\$ -	\$ -	\$ 827	\$ 3,944	\$ 12,945	
d3	<b>TOTAL SOFT COSTS</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,788</b>	<b>\$ 27,609</b>	<b>\$ 90,614</b>	
e3	<b>PRIORITY 3 - TOTAL PROJECT COST (EXCLUDING FINANCING)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 22,326</b>	<b>\$ 106,490</b>	<b>\$ 349,512</b>	
f1		\$ 4,250,243	\$ 7,042,241	\$ 4,722,186	\$ 5,294,606	\$ 4,175,978	
f2	<b>FIVE YEAR TOTAL COST (Confirmed)</b>						<b>\$ 25,485,254</b>

NOTES:									
1	List includes only preventative maintenance, planned repairs/replacements, and some minor master planning items.								
2	List excludes building renovations, additions, programmatic changes, principal requests, site improvements, zoning approvals, etc.								
3	The cost estimates will be updated after the field investigations and programming phase. A design contingency of 5% is included to address these potential costs.								
4	Deferring projects may increase the noted estimated project cost beyond the inflation factor. Considerations include, but are not limited to impact to education, domino effect to other building elements, safety concerns, physical conditons, etc.								
5	The cost estimates are subject to change based on economic conditions. The current inflationary factor is noted in cell I5. All budgetary costs are compounded annually.								
6	Each listed school year includes an allowance of \$75,000 for unplanned/unforeseen projects. Historically, facilities has recorded unplanned projects in this range.								
7	The list excludes the security camera replacement program and other security hardware. These items will be included in the Security Operating Budget.								
8	The list excludes significant CIP items that are required at SFES, HCES, RES and NES. The project costs have been reduced based on the master planned approved on 25APR19.								
9	The items have been prioritized for each school year. The priority is subject to change based on the annual assessment of the items listed. The list is also subject to change based on the ongoing use of the facilities, age of equipment, current conditions, etc.								
10	CIP items subject to the Master Planning process relate to, but are not necessarily limited to the following facilities: RMS (after planned temporary use for RHES, AST, HCES and RES ending 2023). Pending the final detemination, projects such as roof replacements would require reconsideration or scope changes.								
11	Projects for following four years have been prioritized and will be re-sorted next year by priority based on current needs and available funding at that point								
		Indicates deferred project from previous year(s)							
		Indicates non-renewal project (one-time project, programmatic, security or master planning item)							
		Indicates planned projects for noted year							

# **CIP Budgeting Formula and 5-Year Budget Analysis**



# The Capital Improvement Plan

## Summary of Projected 5-Year Capital Improvements Projects

Year for Capital Improvements Project	Total Estimated Construction Cost	Total Soft Costs (Design Contingency, A/E Fees, Permits, Construction Contingency)	Total Estimated Project Cost (Including Projects Deferred from Prior Years)	Total of Deferred Projects
2019 – 2020 (Summer 2020)	\$ 3,148,328	\$ 1,101,915	\$4,250,243	\$ 0
2020 – 2021 (Summer 2021)	\$5,216,475	\$ 1,825,766	\$ 7,042,241	\$ 645,933
2021 – 2022 (Summer 2020)	\$ 3,497,915	\$ 1,224,270	\$ 4,722,186	\$ 1,174,729
2022 – 2023 (Summer 2020)	\$ 3,921,930	\$ 1,372,676	\$ 5,294,606	\$ 3,127,869
2023 – 2024 (Summer 2020)	\$ 3,093,317	\$ 1,082,661	\$ 4,175,978	\$ 1,128,205
TOTALS (5-Years)	\$ 18,877,965	\$ 6,607,288	\$ 25,485,254	\$ 6,076,736

# Capital Renewal Planning Formula and Considerations

## Capital Renewal Planning - Recommended Guidelines and Cost Allocations:

### **APPA Formula:**

Annual budget allocation for routine maintenance and capital renewal is in the range of **2% to 4%** of the aggregate Current Replacement Value (CRV) - **excluding major infrastructure, additions, renovations, non-renewal projects, etc.**

### Footnotes:

- 1) **Association of Physical Plant Administrators**, Now known as **APPA**, Leadership in Educational Facilities. APPA uses **National Center for Educational Statistics**.
- 2) The **National Center for Education Statistics** (NCES) is the part of the United States Department of Education's Institute of Education Sciences (IES) that collects, analyzes, and publishes statistics on education and public school district finance information in the United States.
- 3) Percentage recognition (Intentionally reduced by CRSD)

# Capital Renewal Planning Formula and Considerations

## Capital Renewal Planning – APPA Recommended Guidelines and Cost Allocations:

### APPA Formula (Continued):

(a) Routine Maintenance =	.5% to 1.5% (CRV)
(b) Capital Renewal =	1.5% to 2.5% (CRV)

### **Recurring annual budget guideline =**

(a) + (b) = 2.0% to 4.0% Current Replacement Value

APPA - Routine Maintenance =	\$ 1.95M to \$ 5.85M
APPA - Capital Renewal =	\$ 5.85M to \$ 9.75M
<b>Total budget</b>	<b>\$ 7.80M to \$15.6M</b>



# Capital Renewal Planning Formula and Considerations

## Capital Renewal Planning - Recommended Guidelines and Cost Allocations:

### **APPA Formula (Continued):**

*When a backlog of deferred maintenance has been allowed to accumulate, spending must exceed the recommended budget until the backlog has been eliminated.*

***Note: Deferred work remains at \$ 6,076,736***

Based on the APPA formula, CRSD should be appropriating **\$7.8M to \$15.6M annually** towards Routine Maintenance and Capital Improvements Projects. (1,950,000 SF x \$200.00 x 2% - 4% minimally).

# Capital Renewal Planning Formula and Considerations

## Capital Renewal Planning – CRSD Formula and Cost Allocations for Board Consideration:

### **CRSD Formula:**

Recommends appropriating **\$3.9M to \$7.8M annually** towards Capital Improvements Projects. (\*1,950,000 SF x \$200.00 x 1% - 2% minimally)

*Recommends exclusion of Fees and Contingencies (~25-30%). Included in the CRSD formula*

*\*Note: Square footage includes 10 ES, 2 MS, RMS and 2 HS's),  
Excludes all ancillary buildings.*

# Capital Renewal Planning History and Considerations

Considerations include, but are not limited to:

- ✓ CIP budget should exclude Non-Renewal projects such as security enhancements, master planning type projects, educational programming, furniture, fixtures and equipment, etc.
- ✓ Plan should be developed with Capital Renewal/CIP/Major Maintenance type projects such as paving restoration, sidewalk repairs, roof reconditioning, masonry restoration, equipment replacement, finishes, field repairs, fencing, etc.
- ✓ Plan should be dynamic and updated annually to reflect actual conditions and budget.

***Avoid deferred maintenance at all costs***

# Deferred Maintenance

## Considerations:

- ✓ The bigger the deferred maintenance number gets, the harder it is going to be to maintain the facility at a serviceable level. **As shown on 5-Year Plan**
- ✓ Deferred maintenance can risk unplanned school closings resulting from failed equipment, failed utilities, environmental issues, etc.
- ✓ Deferred maintenance costs can add significant costs to work scheduled through a Capital Improvements Plan
- ✓ Some formulas suggest that for every \$1 of deferred maintenance costs, \$2-4 will be needed later in Capital Costs.



# The Capital Improvement Plan

## Summary of Projected 5-Year Capital Improvements Projects

Year for Capital Improvements Project	Total Estimated Construction Cost	Total Soft Costs (Design Contingency, A/E Fees, Permits, Construction Contingency)	Total Estimated Project Cost (Including Projects Deferred from Prior Years)	Total of Deferred Projects
TOTALS (5-Years)	\$ 18,877,965	\$ 6,607,288	\$ 25,485,254	\$ 6,076,736

### Final Analysis – Current 5-Year Plan

1

2

1 5-Year estimated costs when averaged (including deferred work): \$ 5.1M annually

2 5-Year estimated costs when averaged (deferred work only): \$ 1.2M annually

3 5-Year estimated costs when averaged (excluding deferred work): **\$ 3.9M annually**

#### CRSD Formula:

Recommends appropriating **\$3.9M to \$7.8M annually** towards Capital Improvements Projects.

Min. \$3.9M per CRSD formula

**Suggest \$4.0 - 4.5M Annually**  
(to offset some soft costs)

**If district has the ability to address deferred work**

# Capital Renewal Planning Formula and Considerations

## Capital Renewal Planning – Budget Considerations:

### **In Summary:**

1. Consider committing to a \$4M Annual CIP Budget to maintain all facilities including, those recently renovated and expanded, projects under construction and planned projects including CR STAR Center, RHES, SFES, HCES, RES, CRHS North and South Synthetic Turf.
2. The commitment of an annual budget of \$4M over the next 5 years coupled with the potential borrowing of ~\$5.5M would allow the District to address the deferred projects projected through the year 2024.
3. The budget for the upcoming 2020 CIP projects is \$4,250,243.
4. **The request for the approval of a total project budget in the amount of \$4,250,243 will be included on the 14NOV19 Board Meeting agenda unless an alternative amount is suggested based on this evenings discussions.**

# CIP NEXT STEPS and SCHEDULE

Item No.	Action Item	Date	Meeting
1	Update and Distribute the Annual CIP v.8 (2019-2020)	10OCT19	FACCOM Meeting
2	Discuss Annual and Long Term Budget Considerations and Possible Options	07NOV19	Joint FACCOM/FINCOM Meeting
3	Board Approval of Budget for 2020 Summer Projects	14NOV19	Board Meeting
4	Commence with 2019/20 CIP Projects	15NOV19	D'Huy and Team
5	Document, Bid, Bid Recommendations	15NOV19 - 09JAN20	FACCOM Meeting
6	Board Approval - Award Bids of 2019/2020 Summer Projects	23JAN20	Board Meeting
7	Submittals, Schedules, Procure Materials, Permits, Etc.	24JAN20 – 29JUN20	N/A
8	Construction Activities	29JUN20 – 30AUG20	N/A

# Board Agenda Items

(November 17, 2019)





### Hillcrest and Richboro ES Renovations Projects

### Professional Services

#### SchraderGroup Architects:

- 1) Pre-Design, Schematic Design, Design Development, Construction Documents, Procurement, Bid Phase and Construction Administration Phase Services
- 2) A documented reduction of fees in the amount of \$224,529 for combining the Pre-Design, Schematic Design, Design development and Construction Phase Services and based on our ongoing teaming and value professional relationship
- 3) Fees include Architectural, Civil, Structural, Mechanical, Plumbing and Electrical Design
- 4) **HCES Total Fees: \$ 918,665**                      **RES Total Fees: \$ 709,338**

#### D'Huy Engineering, Inc.:

- 1) Pre-Design, Schematic Design, Design Development, Construction Documents, Procurement, Bid Phase and Construction Administration Phase Services
- 2) A documented reduction of fees in the amount of \$22,000 for combining the Pre-Design, Schematic Design and Design Development Phase Services and based on our ongoing teaming and value professional relationship
- 3) Fees include all phases of Design, Construction and Project Closeout
- 4) **HCES Total Fees: \$ 496,000**                      **RES Total Fees: \$ 487,000**

# UPCOMING MEETINGS

(Note: Meeting Dates are Subject to Change)



# Facilities Improvements Project Updates

## CRHS N&S Turf, STAR & SFES Projects – Master Land Development Schedule

### PRELIMINARY LAND DEVELOPMENT SCHEDULE – MASTER SCHEDULE (*Updated 07NOV19*)

Project	Activity	Meeting Type and Location	Date	Time
SFES	Sketch Submission	PC - Upper Makefield Township	25SEP19	7:00pm
STAR/Turf	PC Preliminary	PC - Northampton Township	01OCT19	7:30pm
<b>STAR/Turf</b>	<b>Zoning Hearing Board</b>	<b>ZHB – Northampton Township</b>	<b>11NOV19</b>	<b>7:30pm</b>
<b>STAR/Turf</b>	<b>PC Conditional Final</b>	<b>PC – Northampton Township</b>	<b>12NOV19</b>	<b>7:30pm</b>
SFES	PC Preliminary	PC – Upper Makefield Township	05DEC19	7:00pm
STAR/Turf	BOS Final	BOS – Northampton Township	18DEC19	7:30pm
SFES	Zoning Hearing Board	ZHB – Upper Makefield Township	28JAN20	7:00pm
SFES	PC Conditional Final	PC – Upper Makefield Township	26FEB20	7:00pm
SFES	BOS Preliminary	BOS – Upper Makefield Township	17MAR20	7:00pm
SFES	BOS Final	*BOS – Upper Makefield Township	21APR20	7:00pm

\*If needed, to be confirmed. Determination based upon Township review and discussion

*Note: All dates subject to change base on Township mtg. schedules, review comments & submission dates*

# Upcoming Meetings & Topics:

Meetings and Topics include, but may not be limited to:

MEETING DATE	MEETING TYPE	PROBABLE TOPIC/AGENDA ITEM
14NOV19	Act 34 Hearing	Act 34 Hearing for Council Rock STAR Center - 6:00pm Location: Chancellor Center Board Room
12DEC19	FACCOM	Facilities Improvements Update
19DEC19	FACCOM	Board approval of SFES Act 34 Resolution/Advertise
09JAN20	FACCOM	Review CRHS North Turf/Track Bid Results and Recommendation
23JAN20	Act 34 Hearing	Act 34 Hearing for Sol Feinstone ES Additions and Renovations – 6:00pm (Pending Board Approval)

*Note: Dates and Topics are Subject to Change and/or Expand*





# Finance Committee-Board Agenda Items

- Approve Proposal for On-Site Transfinder Training
- Approve Homestead/Farmstead District Agreement with Bucks IU for 2019-2020
- Approve Amended 403(b) Plan Document
- Approve Bid #19-34, *Furniture Supplies Catalog Discount Bid*



# Public Comments - Thank you!

Next FACCOT Meeting: Thursday, December 12, 2019 @ 7:00pm



sol feinstone elementary school rendering-SGA



rolling hills elementary school rendering - SGA