



Crabtree, Rohrbaugh & Associates

BERMUDIAN SPRINGS
SCHOOL DISTRICT

ARCHITECTURE /
ENGINEERING SERVICES
MIDDLE SCHOOL STUDY
DECEMBER 4, 2018

INTRODUCTION

- This community meeting this evening is intended to present the district information gathered to this point in the study and listen to the comments from the community.
- This meeting is not intended to take a vote on what option to select.
- At the conclusion of tonight's presentation we will open a public comment period of the meeting. The public comment will follow the format of our regular board meetings.
- As per practice, each speaker must be a resident or an employee of the district. Each speaker will have 5 minutes to speak. The duration of the public comment period will be 60 minutes.
- If we run out of time for public comment we will record any remaining questions and place the answers on the district website.

1

STUDY OVERVIEW

2

FACILITY ASSESSMENT

3

OPTIONS

4

PROJECT SCHEDULE

5

FINANCIAL ANALYSIS

① STUDY OVERVIEW

STUDY OVERVIEW

MIDDLE SCHOOL

1. Evaluate ability to provide the District's Educational Program & physical condition with an emphasis on a secure entrance.
2. Identifies improvements necessary to meet current construction standards, safe school design principles and building codes.
3. Provide estimated costs to address deficiencies and meet District goals.
4. Explore options for Board consideration.
5. Establish a project schedule.

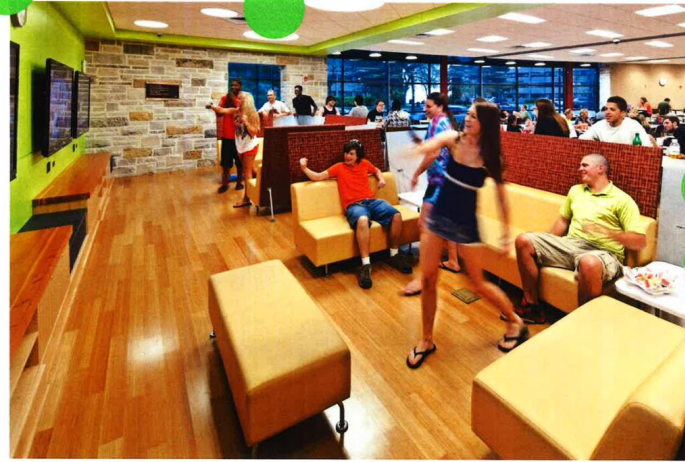


STUDY OVERVIEW - TIMELINE

- April 24, 2018 – Kick-Off Meeting
- May 8, 2018 – Study Meeting
- May 24, 2018 – Study Meeting
- May 29, 2018 – Visual Listening Exercise
- June 5, 2018 – Study Meeting
- June 8, 2018 – Middle School Survey
- **June 11, 2018 – Board Presentation: Admin. Relocation Option**
- July 12, 2018 – Study Meeting
- July 24, 2018 – Study Meeting
- August 7, 2018 – Study Meeting
- **August 13, 2018 – Board Presentation: Middle School Study**
- **September 10, 2018 – Board Presentation: Project Process & Approach**
- **November 12, 2018 – Board Presentation: Community Presentation Prep**



6



- STUDENT ACTIVITY
- COLOR & MATERIAL

5

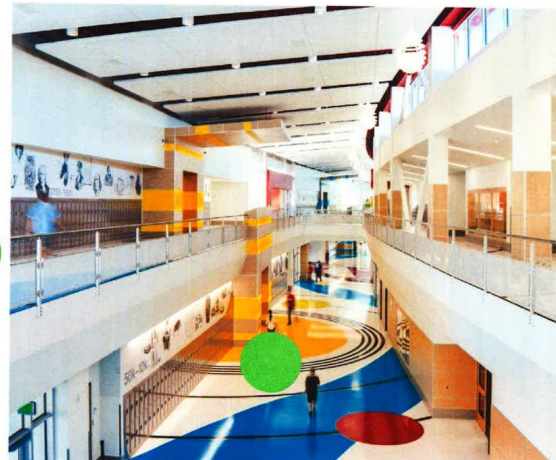
STUDY OVERVIEW

May 29th Visual Listening Exercise with Students and Faculty



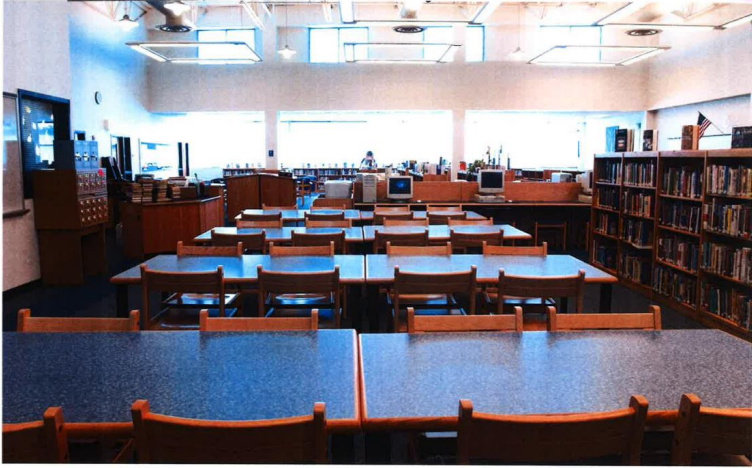
- OPEN
- OPPORTUNITY FOR SOCIATION

40



- COLOR
- PATTERNS
- MATERIAL
- HARLEM DAYLIGHT
- OPENNESS

73



- NO COLOR
- NO SOFT SEATING
- NO COMP. / TECH
- ORGANIZATION
- FLEXIBILITY

50



- SOFT SEATING
- OPEN SPACE
- COLORS
- STUDY HALL

16

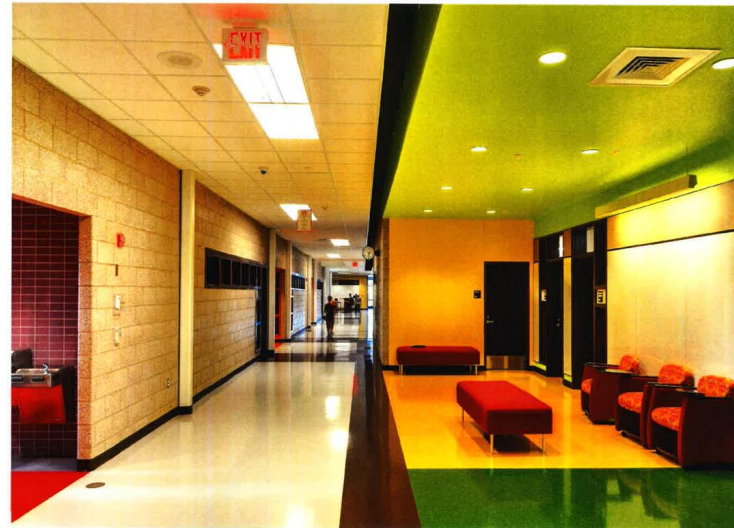
STUDY OVERVIEW

May 29th Visual Listening
Exercise with Students
and Faculty



- NO PRIVACY
- NOT DESIGNED FOR FURNITURE

10



3A

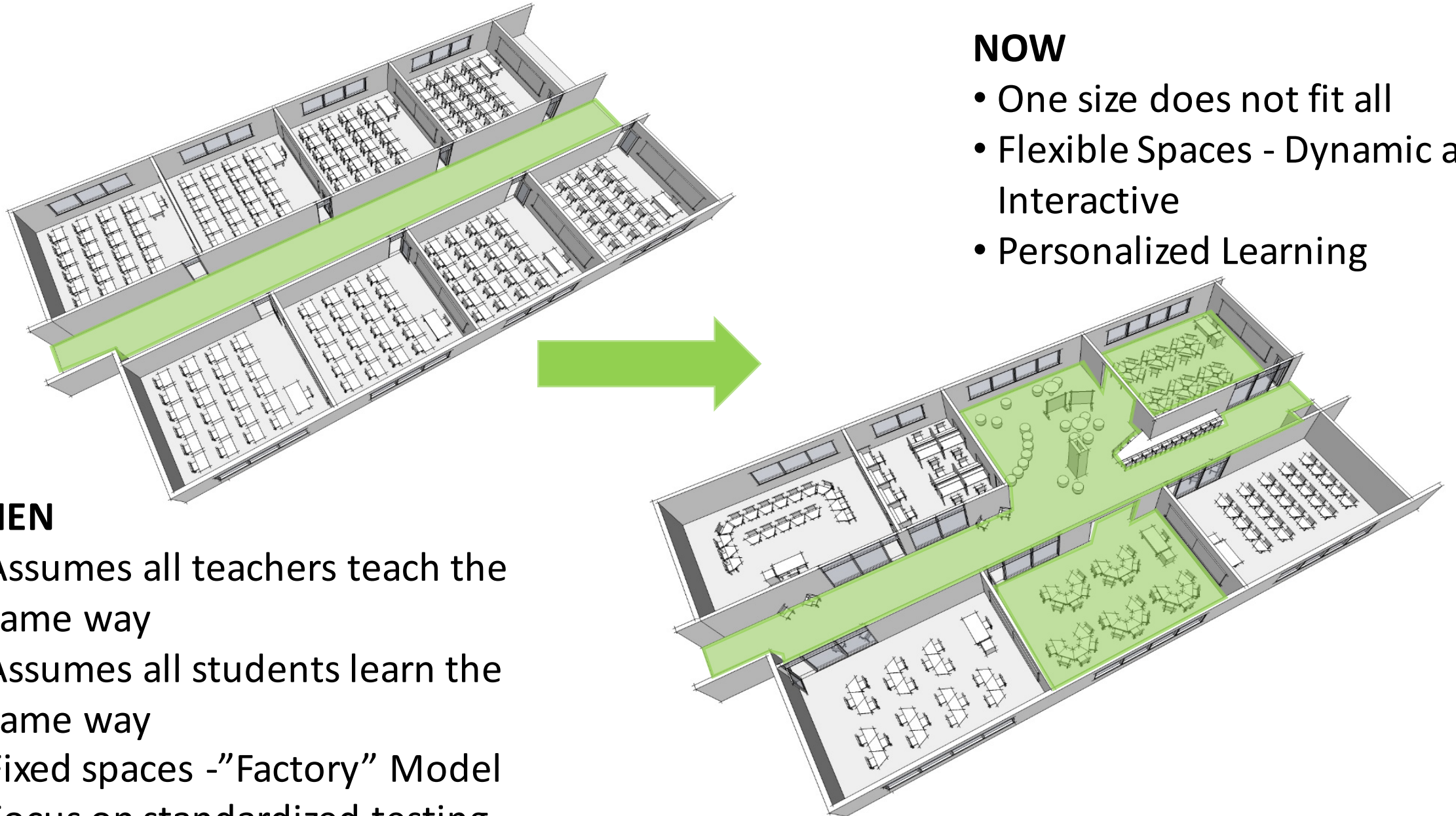
STUDY OVERVIEW

NOW

- One size does not fit all
- Flexible Spaces - Dynamic and Interactive
- Personalized Learning

THEN

- Assumes all teachers teach the same way
- Assumes all students learn the same way
- Fixed spaces - "Factory" Model
- Focus on standardized testing



② FACILITY ASSESSMENT

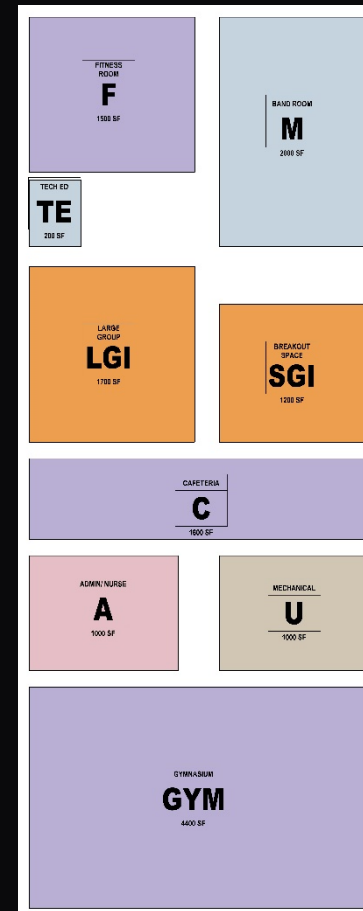
FACILITY ASSESSMENT

Educational Program Deficiencies:

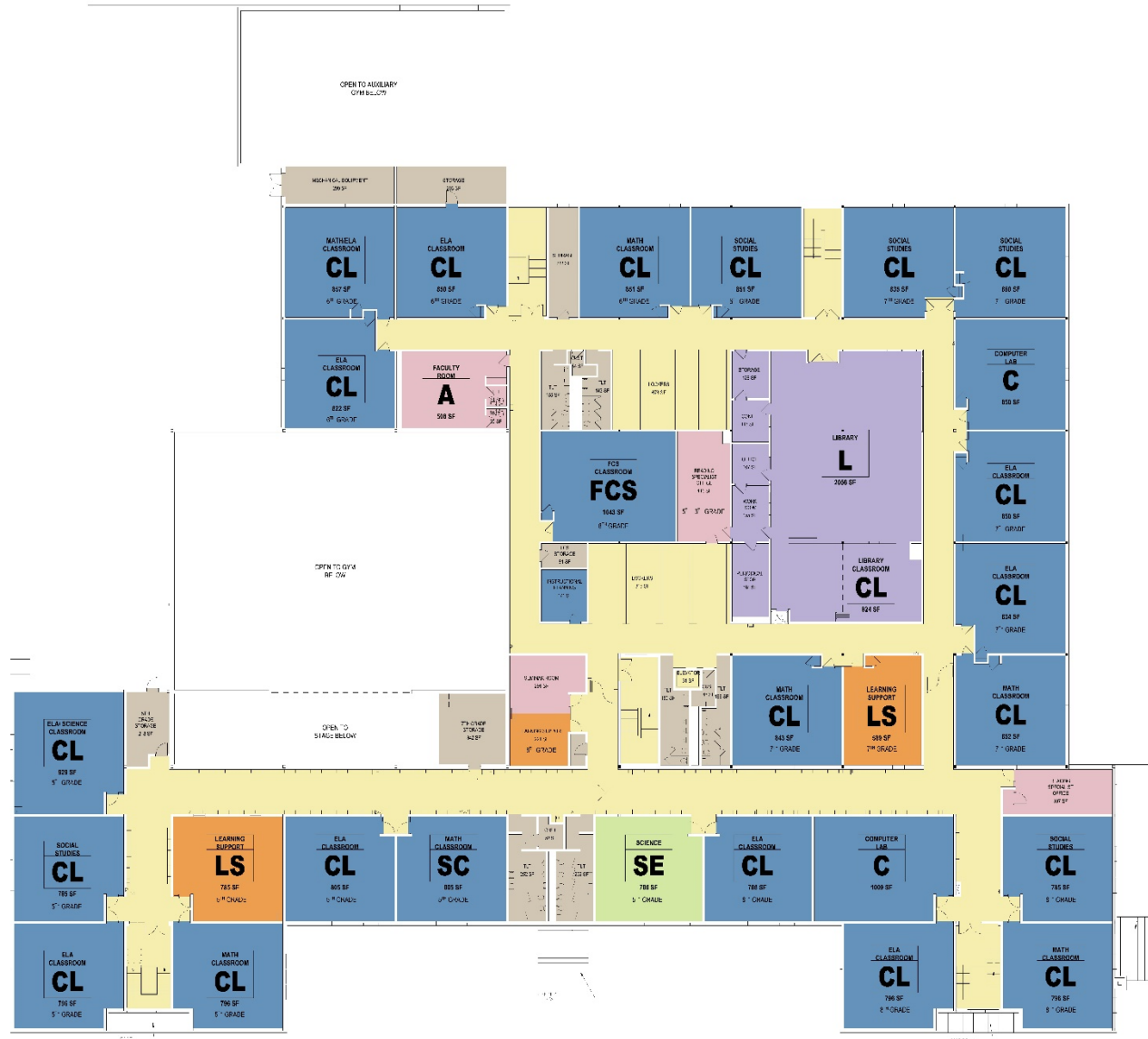
1. Grade Level organization & separation from public spaces
2. Undersized Spaces:
 1. Science Labs
 2. Tech Ed. & Art
 3. Band
 4. Food Service / Cafeteria
 5. Administration/Nurse/Guidance
 6. Gymnasium (non-competition sized court)
3. Missing Spaces
 1. LGI
 2. Breakout Flexible Space
 3. Fitness Room (located on Stage)
4. Redundant Locker / Team Room spaces
5. Outdated instructional furnishings (chalkboards, furniture and equipment)

Square Footage

Deficiencies



FACILITY ASSESSMENT



Facility Deficiencies:

1. No Secure Vestibule
2. Administration location
3. Lack of natural daylight
4. Insufficient corridor circulation (poor wayfinding)
5. Insufficient corridor locker layout
6. Insufficient queuing space for Parent / Bus drop-off
7. Declining windows & storefront entrance systems
8. Non-compliant ADA sinks & restrooms
9. Damaged masonry
10. Deficient elevator
11. Mechanical, Electrical & Plumbing Systems



Main entrance doors setback from site

SAFE SCHOOL DESIGN GUIDELINES

Site Design

1. Natural surveillance limits the opportunity for crime by taking steps to increase the perception that people can be seen.
2. Is the building Administration strategically located to view people approaching the school?
3. Is there an open approach plaza, sidewalk system that is open for easy monitoring and a clear main entry?
4. Separate bus and parent drop-off



Internal Administration offices

SAFE SCHOOL DESIGN GUIDELINES

One Secure Main Entry

1. Administration should not be internal to the School.
2. Main entry has glass to allow direct line of sight.
3. Glazing at the main entry of a building creates the perception, for someone approaching a school, that they are being viewed.

SAFE SCHOOL DESIGN GUIDELINES



Ability to lock down classroom wings

1. Provide a layered ability to lock down sectors of a school as an individual progresses from a main entry to a classroom – staged access control.
2. It is important that the classroom is not the only line of defense.
3. Fire doors for classroom wings are tied remotely to main Administration panic buttons.
4. Limit access during after school hours.

SAFE SCHOOL DESIGN GUIDELINES

Glazing and limiting blind spots

1. Increasing glazing throughout a school will enhance student supervision.
2. Increasing glazing between classrooms and hallways can help reduce bullying while fostering collaborative learning environments.
3. Increasing glazing at gathering areas and entrances improves visibility for staff and students to identify possible threats.



Locker banks create blind spots



Food Service & Cafeteria operation concerns



FACILITY ASSESSMENT

Inadequate building infrastructure –
Door hardware, data & tech

FACILITY ASSESSMENT



Lack of natural daylight & declining window systems



Humidity issues



Fitness Room on Stage

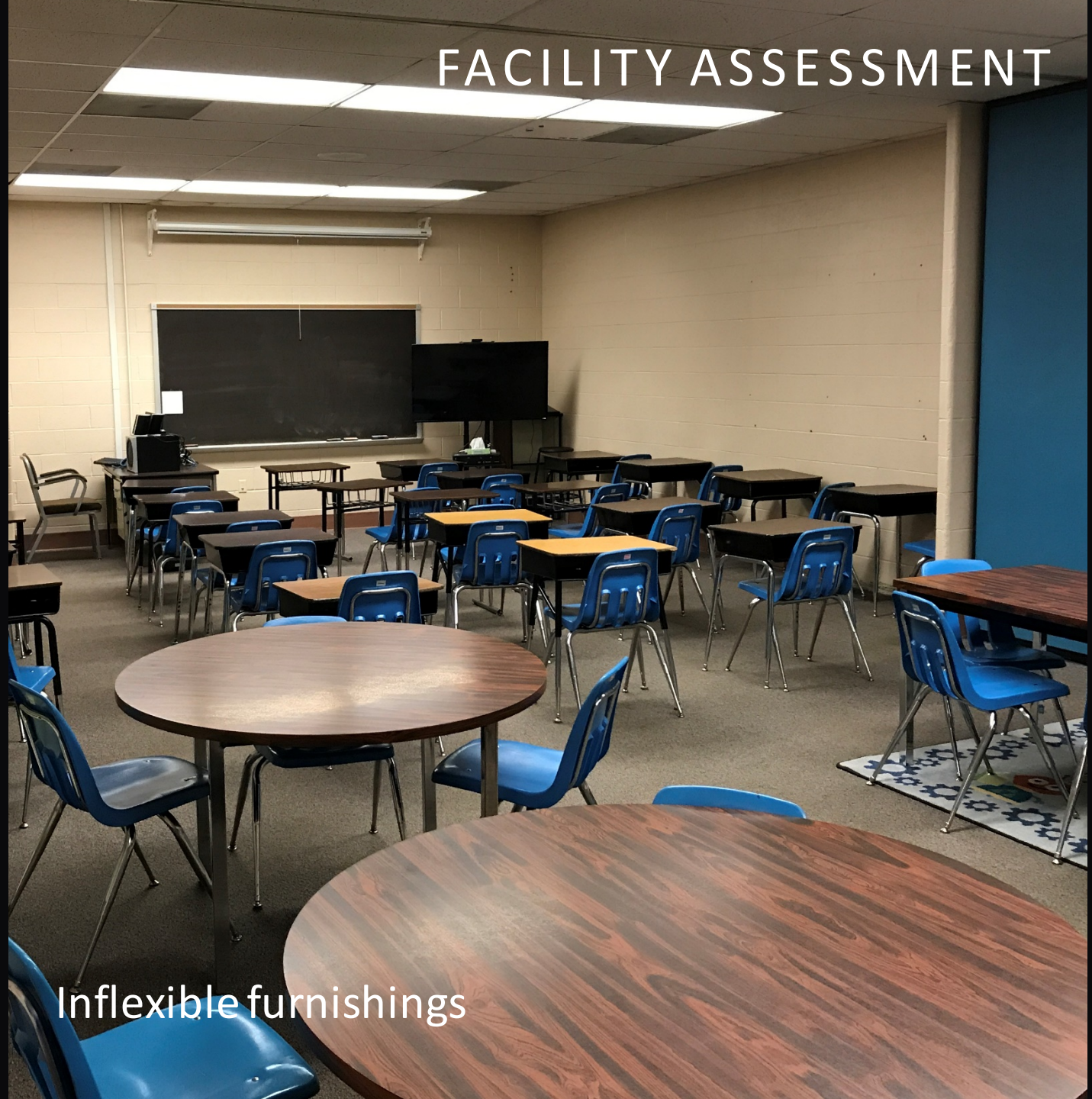


Cots in Storage Rooms

FACILITY ASSESSMENT



Non-ADA compliant sinks



FACILITY ASSESSMENT

Inflexible furnishings

③ OPTIONS

Option 1 – Selective Renovations

Option 2 – Comprehensive Renovations & Additions

Option 3 – New Construction

OPTION 1 – SELECTIVE RENOVATIONS

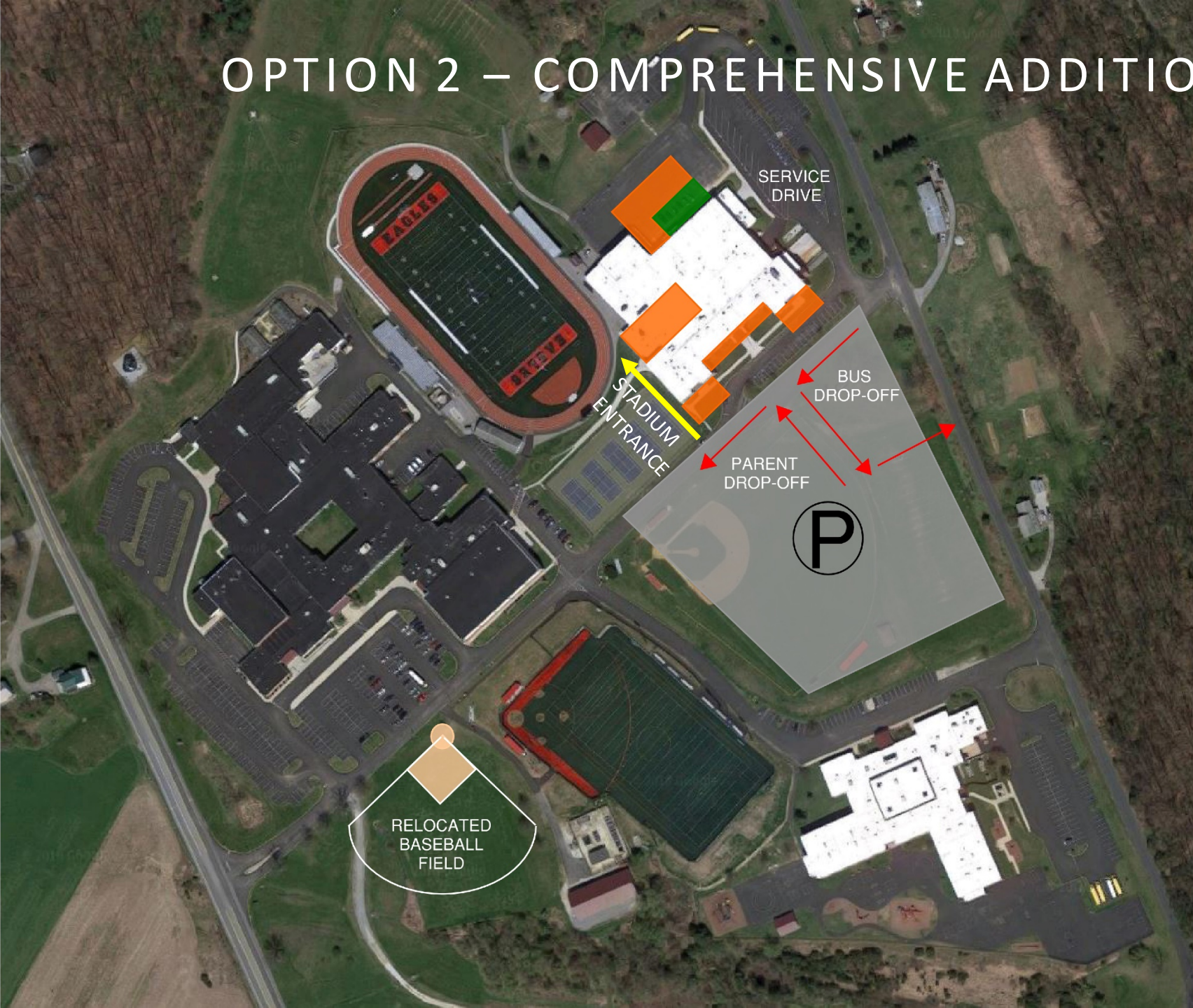


1. New secure vestibule
2. Relocate Admin/Guid/Nurse
3. MEP improvements
4. New exterior doors & windows
5. Locker replacement
6. Brick Repair
7. ADA compliance
8. New ceiling tiles
9. Painting
10. Classroom and Library casework & equipment
11. New Breakout Spaces

OPTION 1 – SELECTIVE RENOVATIONS

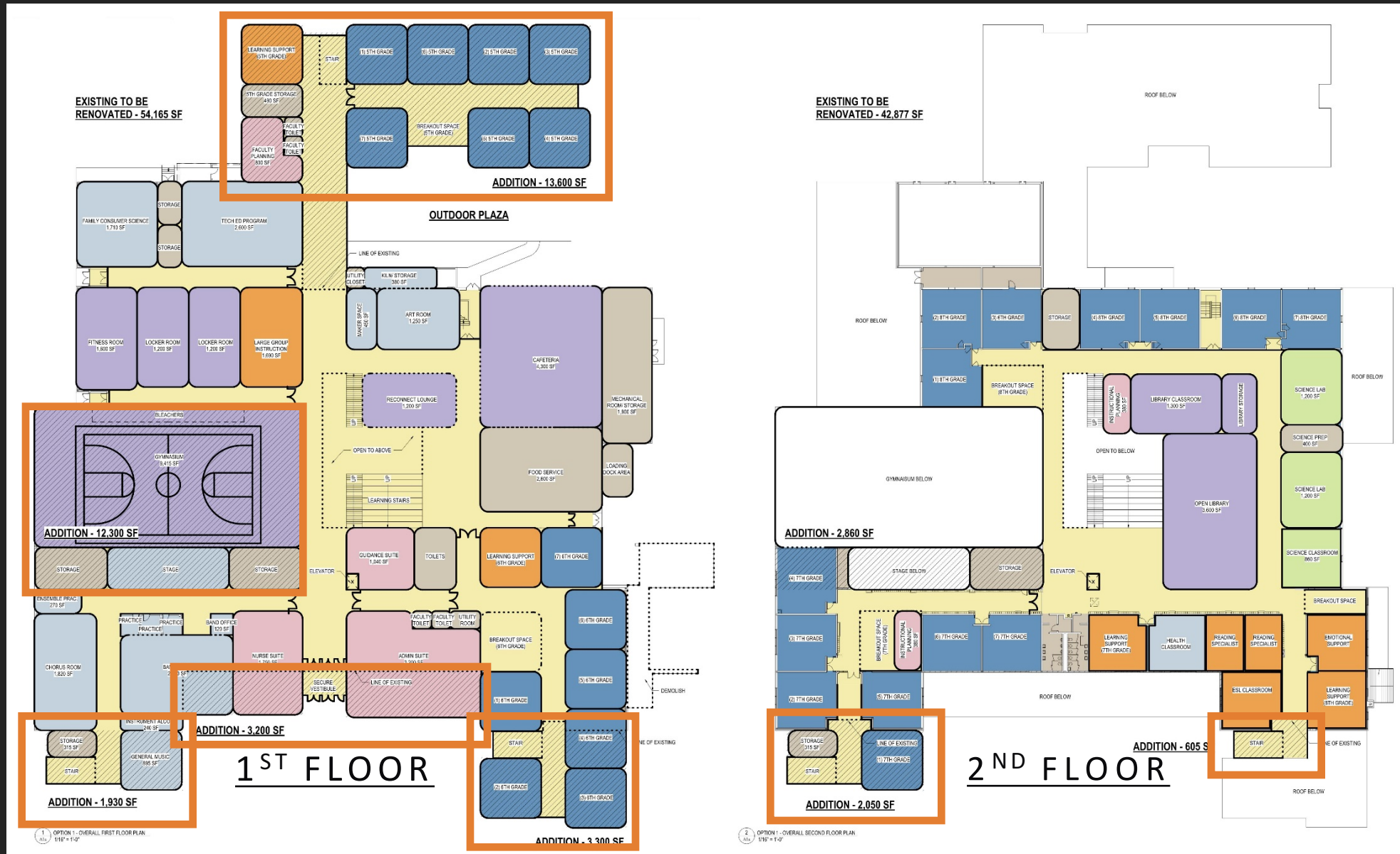
Construction Costs	Low	High
Selective Renovations & Secure Vestibule	\$7,456,711	\$10,035,007
Soft Costs	Low	High
(Contingency, Permits, Testing & Inspections, Professional Fees, Financing, Furniture & Equipment)		
SUBTOTAL	\$1,342,208	\$1,806,301
TOTAL COSTS	\$8,798,919	\$11,841,309

OPTION 2 – COMPREHENSIVE ADDITIONS & RENOVATIONS



1. Separation of Educational Spaces from Public Spaces
2. Relocate Admin/Guid/Nurse
3. New 5th Grade Addition
4. New Gymnasium
5. Cafeteria/Kitchen Reno
6. New Music Addition

OPTION 2 – COMPREHENSIVE ADDITIONS & RENOVATIONS



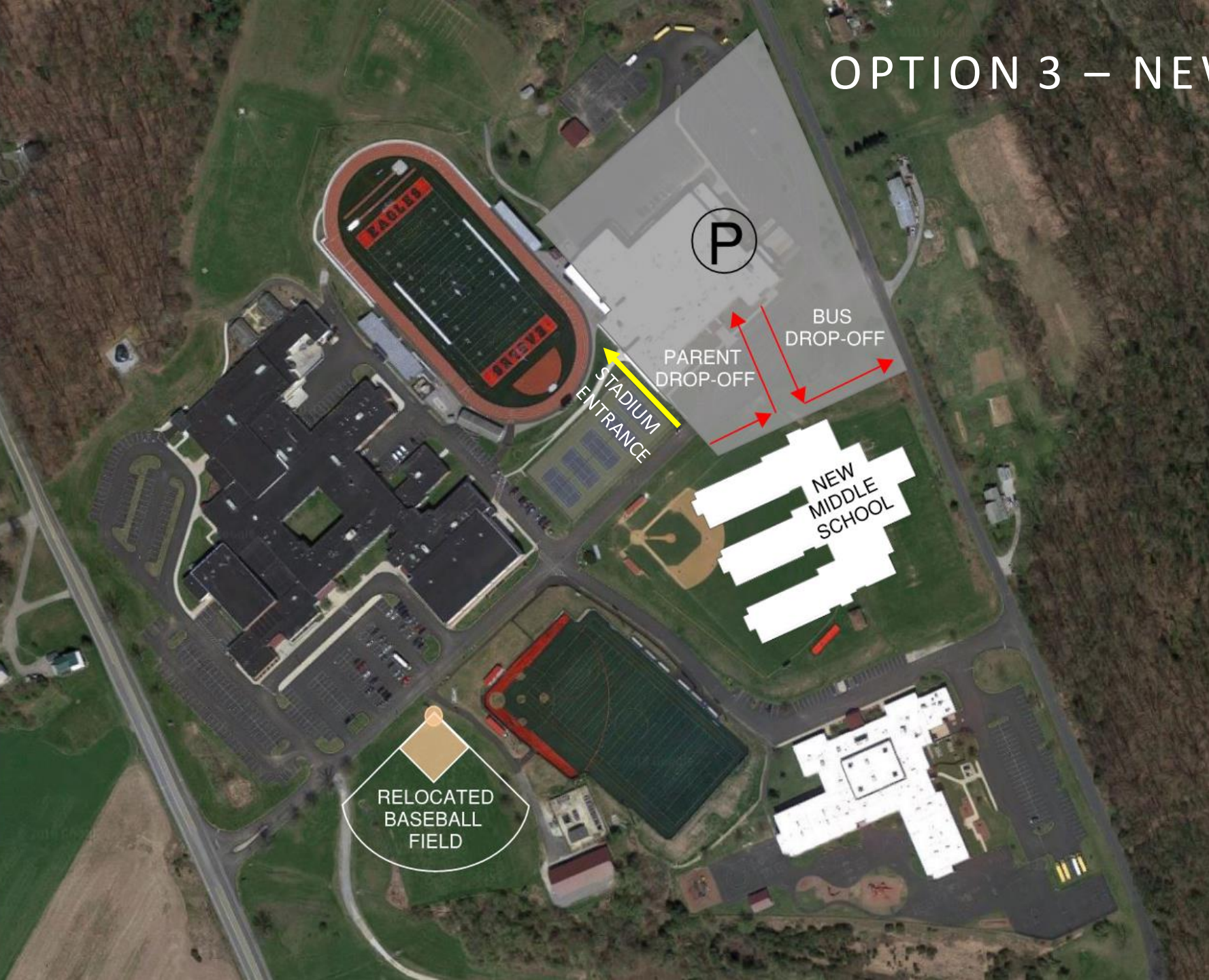
OPTION 2 – COMPREHENSIVE ADDITIONS & RENOVATIONS

<u>Construction Costs</u>	<u>Low</u>	<u>High</u>
Renovation @ 110/120 SF	\$11,319,000	\$12,348,000
New Additions @ 190/200 SF	\$7,949,078	\$8,367,450
Site Construction	\$2,100,000	\$2,625,000
SUBTOTAL	\$21,368,078	\$23,340,450

<u>Soft Costs</u>	<u>Low</u>	<u>High</u>
(Contingency, Permits, Testing & Inspections, Professional Fees, Financing, Furniture & Equipment)		
SUBTOTAL	\$3,846,254	\$4,201,281

TOTAL COSTS	\$25,214,331	\$27,541,731
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OPTION 3 – NEW CONSTRUCTION



OPTION 3 – NEW CONSTRUCTION

<u>Construction Costs</u>	<u>Low</u>	<u>High</u>
New Construction @ 180/190 SF	\$24,214,031	\$25,654,563
Site Construction	\$3,000,000	\$3,500,000
SUBTOTAL	\$27,214,031	\$29,654,563
<u>Soft Costs</u>	<u>Low</u>	<u>High</u>
(Contingency, Permits, Testing & Inspections, Professional Fees, Financing, Furniture & Equipment)		
SUBTOTAL	\$4,898,526	\$5,247,821
TOTAL COSTS	\$32,112,557	\$34,992,382

OPTION SUMMARY

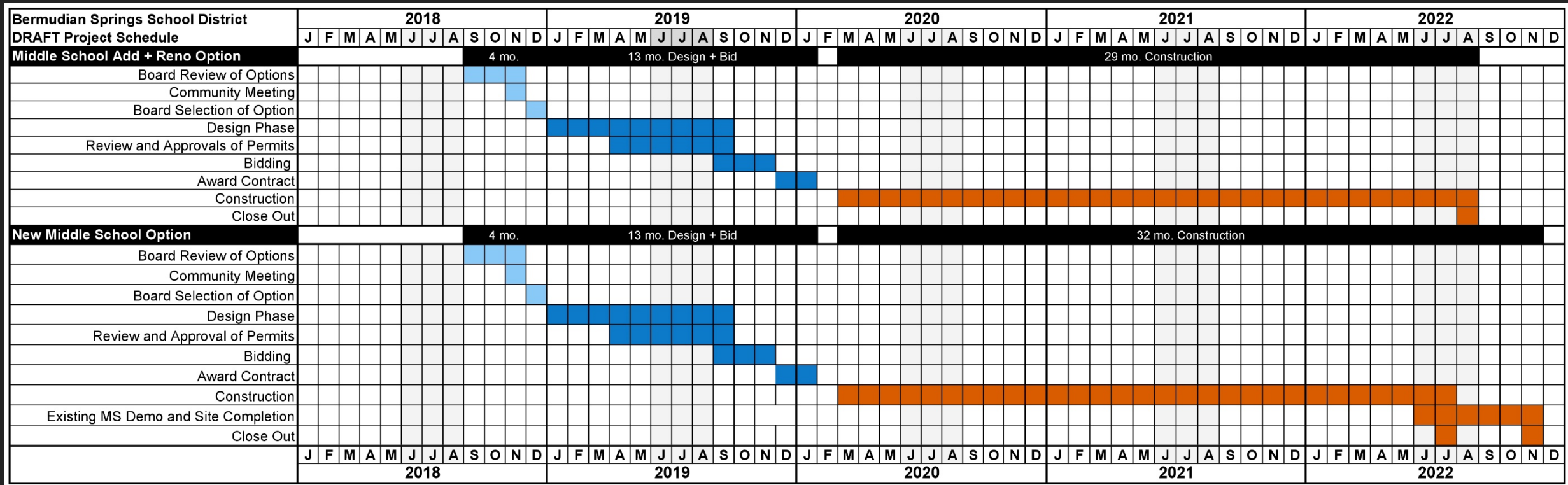
	<u>Low</u>	<u>High</u>
Option 1	\$8.8M	\$11.8M
Option 2	\$25.2M	\$27.5M
Option 3	\$32.1M	\$35.0M

④ PROJECT SCHEDULE

PROJECT SCHEDULE

Preliminary Design & Construction Schedule

1. Board establishes project budget
2. Board selects option
3. Authorize architect to proceed





FINANCIAL ANALYSIS

Bermudian Springs School District

January 2018
Funding Discussion

January 2018



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RBC Capital Markets

Bermudian Springs School District

Gross Debt Outstanding

As of July 1, 2018

As of Fiscal Year Ending June 30	(1) 2015 Financing	(2) 2016 Financing	Total
2019	1,470,152	1,696,450	3,166,602
2020	1,470,094	1,699,450	3,169,544
2021	1,469,569	1,696,800	3,166,369
2022	1,473,576	1,698,700	3,172,276
2023	1,472,022	1,695,900	3,167,922
Total	7,355,412	8,487,300	15,842,712

(1) Debt Service on Series of 2015 Note Fixed Rate (Bank Loan), average yield 1.87%, pre-payable anytime.

(2) Debt Service on Series of 2016 Fixed Rate (Bond), average yield 1.55%, non-call.

Bermudian Springs School District

Net Debt Outstanding

As of July 1, 2018

As of Fiscal Year Ending June 30	2015 Financing	2016 Financing	Total
2019	1,313,573	1,515,770	2,829,343
2020	1,313,522	1,518,450	2,831,972
2021	1,313,052	1,516,082	2,829,134
2022	1,316,632	1,517,780	2,834,412
2023	1,315,244	1,515,278	2,830,522
Total	6,572,023	7,583,360	14,155,384

Est. Reimb %	17.00%	17.00%
17-18 MVAR	62.65%	62.65%
State Share	10.65%	10.65%
Local Share	89.35%	89.35%

Bermudian Springs School District

Proposed Series of 2019 \$9,885,000 (BQ) and Proposed Series of 2020 \$27,590,000 (BQ)

\$38MM Future Capital Projects

24-Aug-18

Date	Total Net Outstanding D/S (1)	Proposed Series 2019 \$10,000,000 Project Fund (2)	Proposed Series 2020 \$28,000,000 Project Fund (3)	Less: Interest Earnings/ SD Reserves	Total Net Debt	Value of 1 Mill (4)	Total Mills Required	New Mills	Mills Available from Prior Debt (5)	Total Mills in Place	Dollars Appropriated	Budget Surplus (Deficit)
2018	2,831,658				2,831,658	1,100,000	2.57	0.000	2.57	2.57	2,831,658	0
2019	2,829,343				2,829,343	1,100,000	2.57	0.000	0.00	2.57	2,831,658	2,315
2020	2,831,972	406,843			3,238,814	1,100,000	2.94	0.375	0.00	2.95	3,244,158	5,343
2021	2,829,134	406,743	1,246,018	824,137	3,657,757	1,100,000	3.33	0.376	0.00	3.33	3,657,758	0
2022	2,834,412	406,635	1,245,918	415,607	4,071,358	1,100,000	3.70	0.376	0.00	3.70	4,071,358	0
2023	2,830,522	406,525	1,245,810		4,482,857	1,100,000	4.08	0.376	0.00	4.08	4,484,958	2,101
2024	0	3,236,400	1,245,700		4,482,100	1,100,000	4.07	0.000	0.00	4.08	4,484,958	2,858
2025	0	3,236,350	1,245,575		4,481,925	1,100,000	4.07	0.000	0.00	4.08	4,484,958	3,033
2026	0	3,234,950	1,245,425		4,480,375	1,100,000	4.07	0.000	0.00	4.08	4,484,958	4,583
2027	0	1,107,700	3,375,200		4,482,900	1,100,000	4.08	0.000	0.00	4.08	4,484,958	2,058
2028	0		4,484,125		4,484,125	1,100,000	4.08	0.000	0.00	4.08	4,484,958	833
2029	0		4,483,825		4,483,825	1,100,000	4.08	0.000	0.00	4.08	4,484,958	1,133
2030	0		4,481,775		4,481,775	1,100,000	4.07	0.000	0.00	4.08	4,484,958	3,183
2031	0		4,482,750		4,482,750	1,100,000	4.08	0.000	0.00	4.08	4,484,958	2,208
2032	0		4,481,300		4,481,300	1,100,000	4.07	0.000	0.00	4.08	4,484,958	3,658
2033	0		4,482,200		4,482,200	1,100,000	4.07	0.000	0.00	4.08	4,484,958	2,758
2034	0		3,135,000		3,135,000	1,100,000	2.85	0.000	0.00	4.08	4,484,958	1,349,958
TOTAL	16,987,041	12,442,145	40,880,620	1,239,744	69,070,062			1.503				

(1) Annual Net Debt Service for Series of 2015 Note and 2016 Bonds.

(2) Proposed Series of 2019, \$9,885,000 (\$10MM construction proceeds from bond premium) dated May 1, 2019. Arbitrage Yield 3.47% (current rates + 75bps). Local Effort 100%.

(3) Proposed Series of 2020, \$27,590,000 (\$28MM construction proceeds from bond premium) dated May 1, 2020. Arbitrage Yield 4.07% (current rates + 100bps). Local Effort 100%.

(4) FY2017-18 collected mill is worth \$1,100,000 and it remains constant (per the administration February 2018)

(5) District currently funded to approximately \$2,831,658 for annual debt service

Bermudian Springs School District

Proposed Partial Restructuring of Series 2015 Note \$5,360,000 (BQ), Series of 2019 \$9,820,000 (BQ New Money) and Proposed Series of 2020 \$27,950,000 (NBQ New Money)

24-Aug-18

\$38MM Future Capital Projects

Date	Total Net Outstanding D/S (1)	Proposed Series 2019 Rest. \$5,360,000 Net D/S (2)	Proposed Series 2019 NM \$10,000,000 Project Fund (3)	Proposed Series 2020 \$28,000,000 Project Fund (4)	Less: Interest Earnings/ SD Reserves	Total Net Debt	Value of 1 Mill (5)	Total Mills Required	New Mills	Mills Available from Prior Debt (6)	Total Mills in Place	Dollars Appropriated	Budget Surplus (Deficit)
2018	2,831,658					2,831,658	1,100,000	2.57	0.000	2.57	2.57	2,831,658	0
2019	2,829,343					2,829,343	1,100,000	2.57	0.000	0.00	2.57	2,831,658	2,315
2020	1,914,389	166,733	445,935			2,527,057	1,100,000	2.30	0.150	0.00	2.72	2,996,658	469,601
2021	1,516,082	166,622	450,835	1,354,968	326,849	3,161,657	1,100,000	2.87	0.150	0.00	2.87	3,161,658	0
2022	1,517,780	166,505	450,620	1,354,668	162,915	3,326,658	1,100,000	3.02	0.150	0.00	3.02	3,326,658	0
2023	1,515,278	166,378	455,400	1,349,345		3,486,401	1,100,000	3.17	0.151	0.00	3.18	3,492,758	6,356
2024	0	1,698,586	445,025	1,344,125		3,487,736	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,022
2025	0	1,703,018	444,875	1,344,000		3,491,893	1,100,000	3.17	0.000	0.00	3.18	3,492,758	865
2026	0		2,134,650	1,353,850		3,488,500	1,100,000	3.17	0.000	0.00	3.18	3,492,758	4,258
2027	0		2,133,375	1,353,175		3,486,550	1,100,000	3.17	0.000	0.00	3.18	3,492,758	6,208
2028	0		2,133,725	1,352,500		3,486,225	1,100,000	3.17	0.000	0.00	3.18	3,492,758	6,533
2029	0		2,135,475	1,351,825		3,487,300	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,458
2030	0		2,133,400	1,356,150		3,489,550	1,100,000	3.17	0.000	0.00	3.18	3,492,758	3,208
2031	0		522,500	2,965,250		3,487,750	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,008
2032	0			3,486,900		3,486,900	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,858
2033	0			3,486,775		3,486,775	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,983
2034	0			3,487,150		3,487,150	1,100,000	3.17	0.000	0.00	3.18	3,492,758	5,608
2035	0			3,487,800		3,487,800	1,100,000	3.17	0.000	0.00	3.18	3,492,758	4,958
2036	0			3,488,500		3,488,500	1,100,000	3.17	0.000	0.00	3.18	3,492,758	4,258
2037	0			3,490,750		3,490,750	1,100,000	3.17	0.000	0.00	3.18	3,492,758	2,008
2038	0			3,486,250		3,486,250	1,100,000	3.17	0.000	0.00	3.18	3,492,758	6,508
2039	0			3,490,000		3,490,000	1,100,000	3.17	0.000	0.00	3.18	3,492,758	2,758
2040	0			3,486,250		3,486,250	1,100,000	3.17	0.000	0.00	3.18	3,492,758	6,508
2041	0			2,100,000		2,100,000	1,100,000	1.91	0.000	0.00	3.18	3,492,758	1,392,758
TOTAL	12,124,530	4,067,842	13,885,815	49,970,230	489,764	79,558,653			0.601				

(1) Annual Net Debt Service for Series of 2015 Note (remaining after restructure) and 2016 Bonds.

(2) Proposed partial restructuring of Series 2015 Note, \$5,360,000 dated May 1, 2019. Arbitrage Yield 3.45% (current rates + 75bps). Local Effort 89.35%.

(3) Proposed Series of 2019, \$9,820,000 (\$10MM construction proceeds from bond premium) dated May 1, 2019. Arbitrage Yield 3.75% (current rates + 75bps). Local Effort 100%.

(4) Proposed Series of 2020, \$27,950,000 (\$28MM construction proceeds) dated May 1, 2020. Arbitrage Yield 4.63% (current rates + 100bps). Local Effort 100%.

(5) FY2017-18 collected mill is worth \$1,100,000 and it remains constant (per the administration February 2018)

(6) District currently funded to approximately \$2,831,658 for annual debt service

Municipality	Average Assessment	Millage Increase	Average Annual Tax Increase	Average Monthly Tax Increase
East Berlin Borough	\$197,975	0.1510	\$29.89	\$2.49
Hamilton Township	\$215,358	0.1510	\$32.52	\$2.71
Huntington Township	\$192,287	0.1510	\$29.04	\$2.42
Latimore Township	\$196,274	0.1510	\$29.64	\$2.47
Reading Township	\$198,379	0.1510	\$29.96	\$2.50
York Springs Borough	\$149,875	0.1510	\$22.63	\$1.89

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QUESTIONS?



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