



Crabtree, Rohrbaugh & Associates

CARLISLE AREA SCHOOL DISTRICT

DISTRICT-WIDE FEASIBILITY STUDY

COMMITTEE MEETING #4

July 31, 2023

COST CONSIDERATIONS

- Options that consolidate new construction will be more cost effective and will take less time to execute than options that involve many, smaller additions at multiple sites.
- Efficient use of facilities. (Target 90% utilization for elementary schools per PDE recommendations.)
- Less buildings = lower operations & maintenance costs.
- Building on a previously developed site is less expensive than building on an undeveloped site, due to presence of utilities and other infrastructure on site.

COST CONSIDERATIONS

- Occupied, phased renovations have an extended duration and cost premium; temporary modular classrooms add cost.
- Renovation of new or recently renovated space (Lamberton and Wilson) is an inefficient use of resources and will add cost to any option.
- Specialty spaces (Tech Ed and FCS classrooms, Large Group Instructional space, Auditorium) are more expensive to construct than general classrooms.
- The age of an existing facility will have a significant impact on the cost to renovate and/or maintain.



COST CONSIDERATIONS

Conceptual Analysis of Probable Costs

\$

8

Two 5-6 Upper Elementary Schools

Build new 5-6 school for 650 students; Repurpose one elementary adding 150 seats.

\$

5

Two 4-5 Upper Elementary Schools

Build new 4-5 school for 650 students; Repurpose one elementary adding 150 seats.

*** Does NOT address Middle School enrollment.

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9

Two 4-6 Upper Elementary Schools

Build new 4-6 school for 700 students; Repurpose one elementary adding 350 seats.

\$\$\$

6a

Single 7-8 Intermediate w/ K-4 Elementaries

Build new 7-8 School for 1,000 students (off-campus)

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6

Single 7-8 Intermediate School

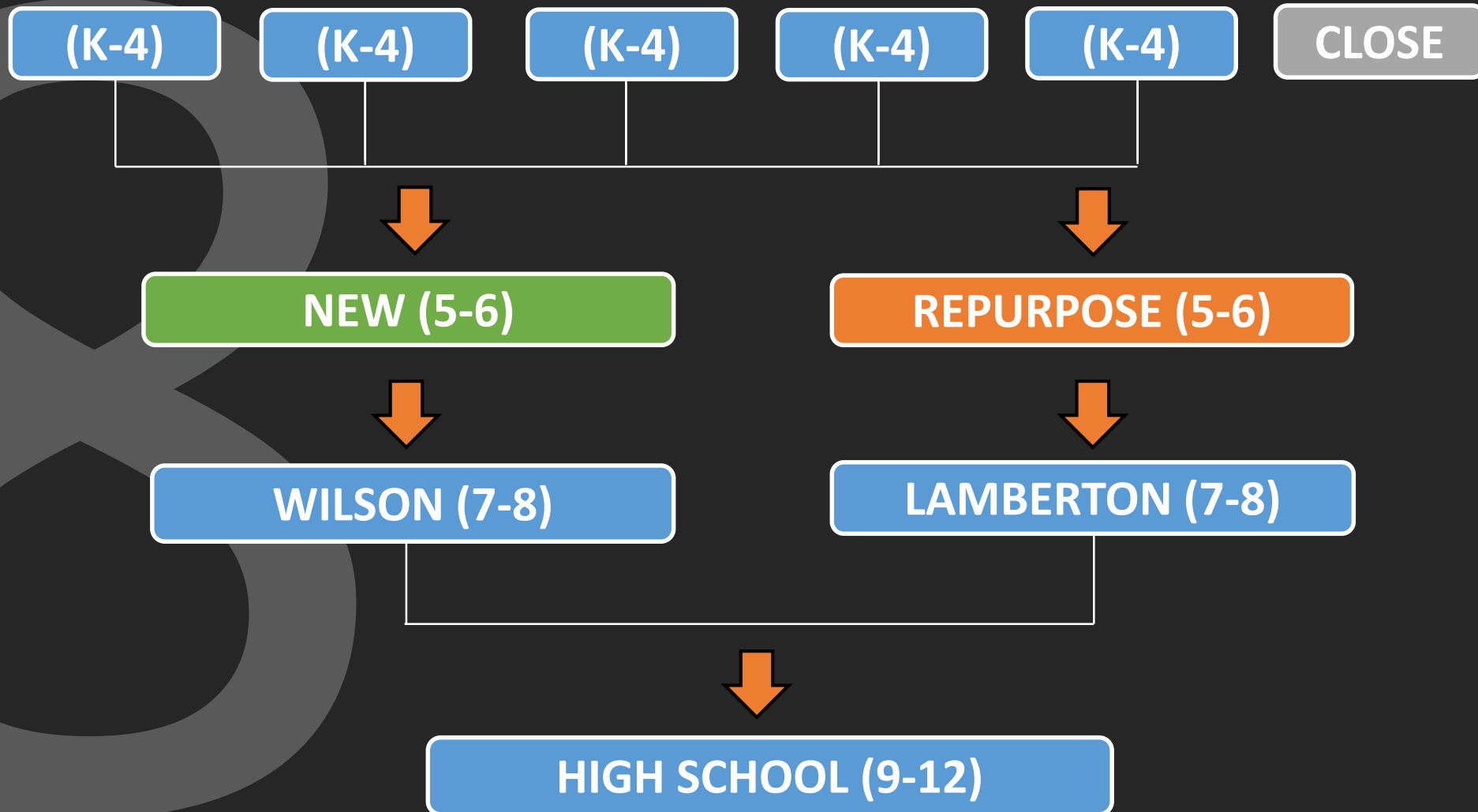
Build new 7-8 school for 1,000 students (off-campus);

Renovate MS for 4-6 programming



Model 8 – Two 5-6 Upper Elementary Schools

Build new 5-6 school for 650 students; Repurpose one elementary adding 150 seats.





Model 8 – Two 5-6 Upper Elementary Schools

Build new 5-6 school for 650 students; Repurpose one elementary adding 150 seats.

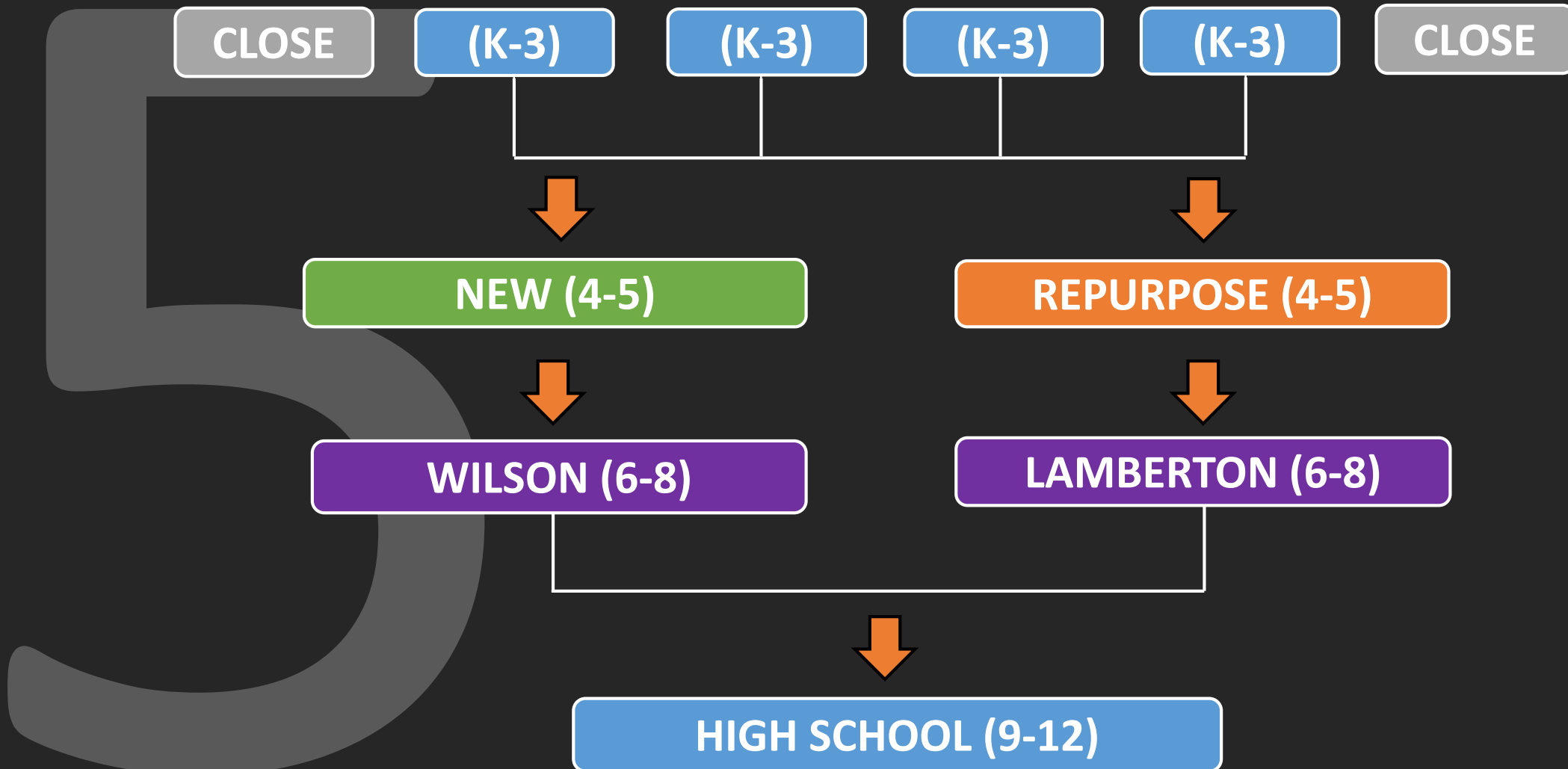
- On-campus construction (Old Bellaire site). Utilizes existing utilities & access.
- Addresses short-term needs (5 years).
- Provides opportunity to monitor enrollment for second-phase projects beyond 5 years (wait-and-see approach to enrollment).
- Assumes no work to Lamberton and Wilson – programmatic changes only.
- Can close one elementary school.



Model 5 – Two 4-5 Upper Elementary Schools

Build new 4-5 school for 650 students; Repurpose one elementary adding 150 seats.

*** Does NOT address Middle School enrollment.





Model 5 – Two 4-5 Upper Elementary Schools

Build new 4-5 school for 650 students; Repurpose one elementary adding 150 seats.

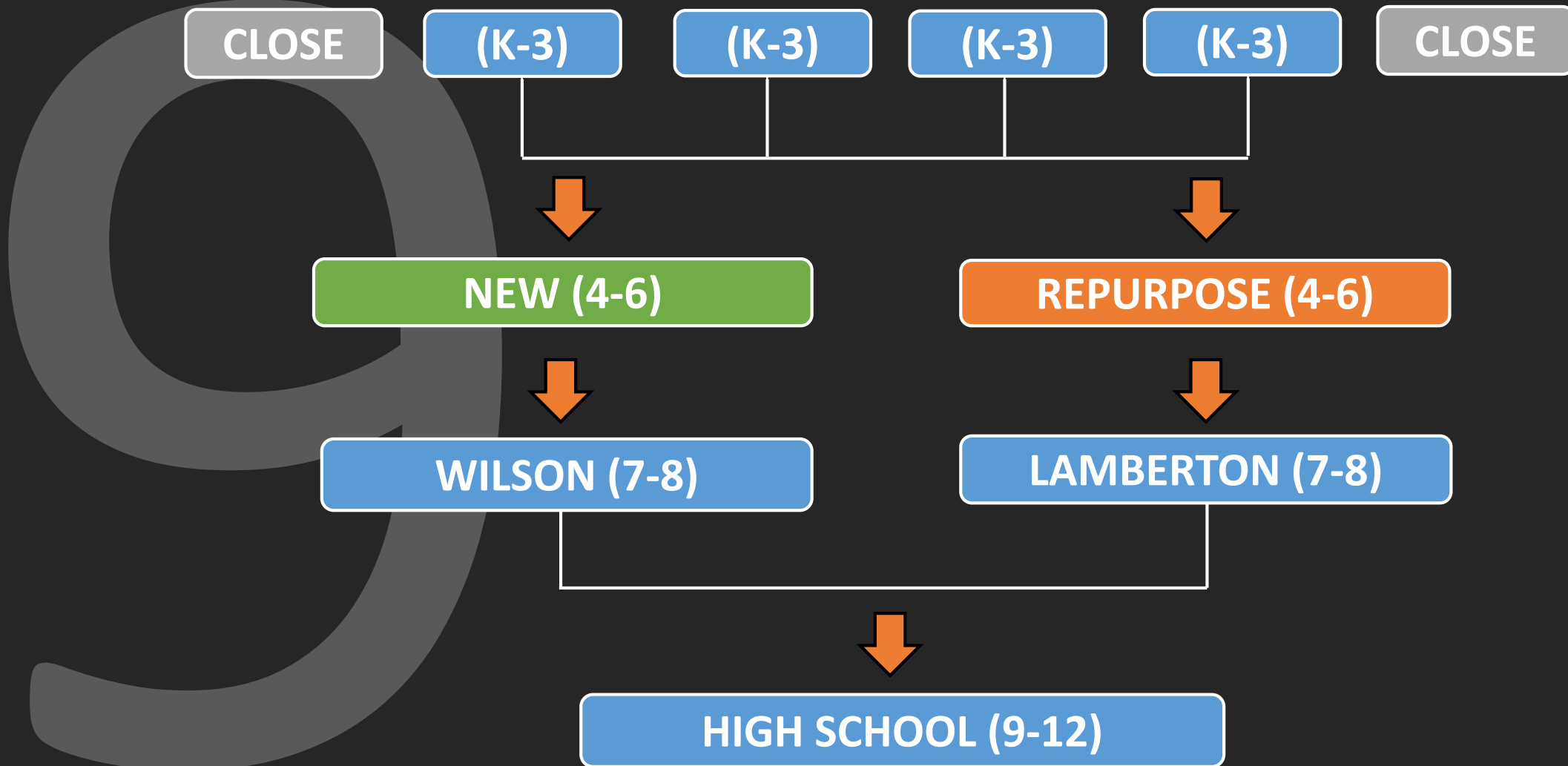
*** Does NOT address Middle School enrollment.

- On-campus construction (Old Bellaire site). Utilizes existing utilities & access.
- Square footage of new construction is similar to Model 8, however this option DOES NOT address middle school enrollment.
- Can close two elementary schools.



Model 9 – Two 4-6 Upper Elementary Schools

Build new 4-6 school for 700 students; Repurpose one elementary adding 350 seats.





Model 9 – Two 4-6 Upper Elementary Schools

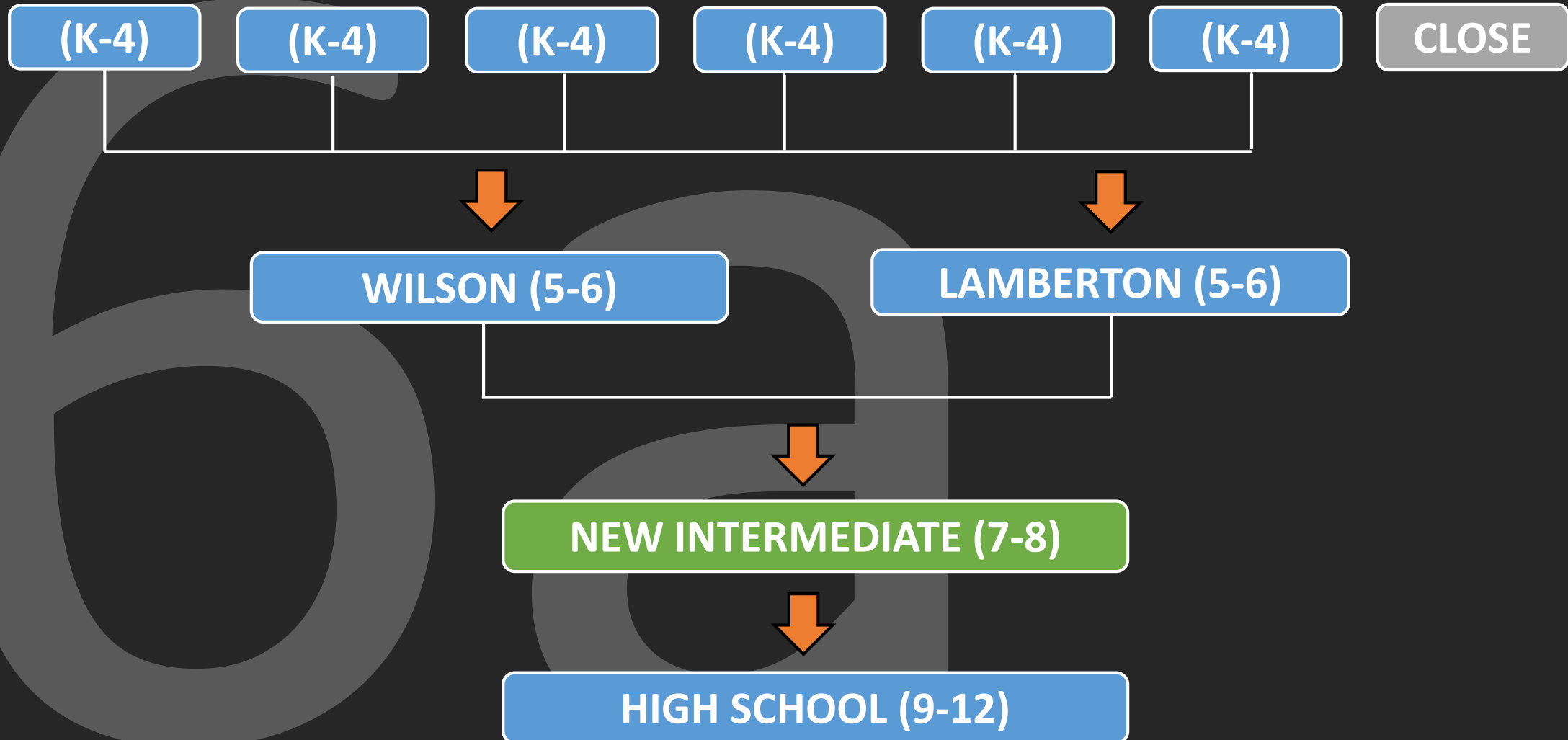
Build new 4-6 school for 700 students; Repurpose one elementary adding 350 seats.

- On-campus construction (Old Bellaire site). Utilizes existing utilities & access.
- Square footage of new construction is greater than Models 5 and 8, due to the new/repurposed schools absorbing 3 grades (4-6) versus 2 grades (4-5 or 5-6).
- Takes a more proactive approach to enrollment.
- Size of the addition at the repurposed elementary school would need to be studied to verify the program can be accommodated.
- Consideration of Lamberton and Wilson recent comprehensive renovation and cost.
- Can close one or two elementary schools.



Model 6a – Single 7-8 Intermediate w/ K-4 Elementaries

Build new 7-8 School for 1,000 students (off-campus)





Model 6a – Single 7-8 Intermediate w/ K-4 Elementaries

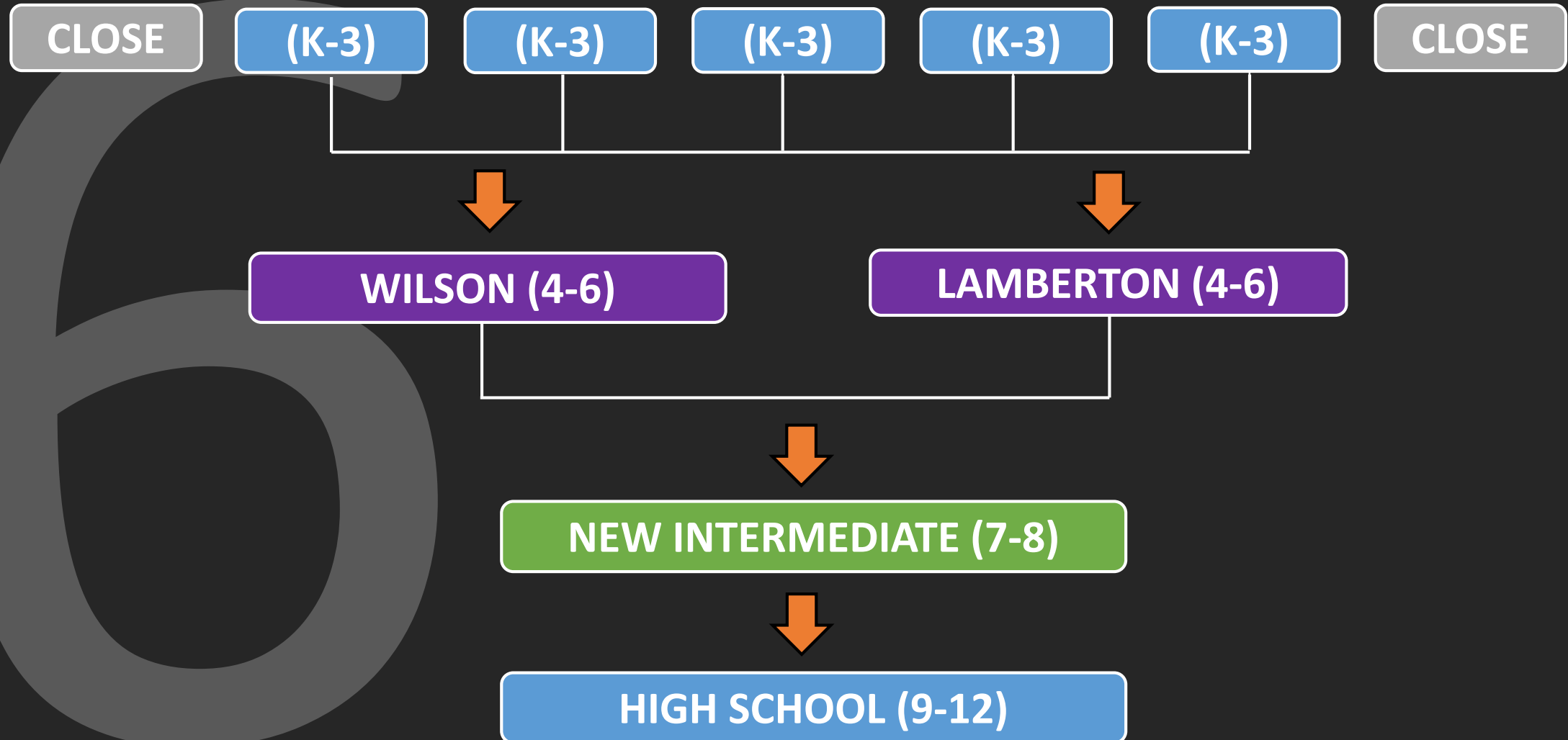
Build new 7-8 School for 1,000 students (off-campus)

- Off-campus construction = additional cost for utilities and other site development infrastructure.
- Square footage of new construction is greater than previous models, due to additional Encore and specialty spaces required for grades 7-8.
- New construction cost per square foot will be higher due to specialty spaces.
- Consideration of Lamberton and Wilson recent comprehensive renovation and cost.



Model 6 – Single 7-8 Intermediate School

Build new 7-8 school for 1,000 students (off-campus); Renovate MS for 4-6 programming





Model 6 – Single 7-8 Intermediate School

Build new 7-8 school for 1,000 students (off-campus); Renovate MS for 4-6 programming

- Off-campus construction = additional cost for utilities and other site development infrastructure.
- Similar to Model 6a, square footage of new construction is greater than previous models, due to additional Encore and specialty spaces required for grades 7-8.
- Similar to Model 6a, new construction cost per square foot will be higher due to specialty spaces.
- Burden of additional cost to renovate Lamberton and Wilson for 4-6 programming.
- Can close two elementary schools.

\$

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Two 5-6 Upper Elementary Schools

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Two 4-5 Upper Elementary Schools

Build new 4-5 school for 650 students; Repurpose one elementary adding 150 seats.

*** Does NOT address Middle School enrollment.

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6a

Single 7-8 Intermediate w/ K-4 Elementaries

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Single 7-8 Intermediate School

Build new 7-8 school for 1,000 students (off-campus);

Renovate MS for 4-6 programming



ELEMENTARY FACILITIES

Existing Facility Cost Considerations

EXISTING FACILITY COST CONSIDERATIONS



- Costs to operate and maintain a facility vary, based on the efficiency of:
 - Building envelope (walls, windows & doors, roof)
 - Building systems (HVAC, plumbing, electrical)



- A comprehensive renovation modernizes a building and makes it fully compliant with current code and educational standards, including:
 - Americans with Disabilities Act (ADA)
 - Building systems overhaul or replacement
 - Energy efficiency
 - Programming and educational needs
 - 20-year cycle per PA Department of Education (PDE)

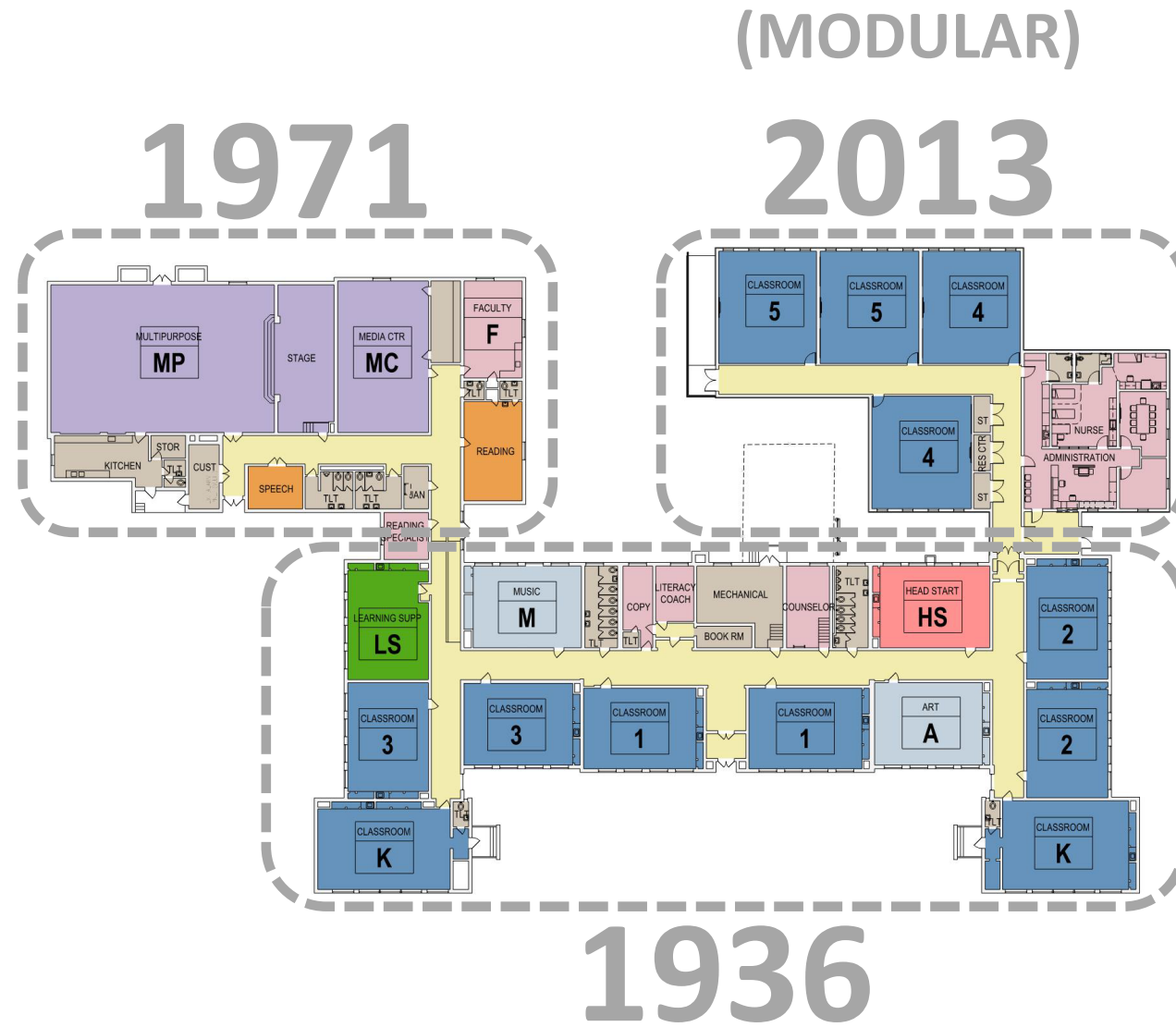


- Alterations, or capital improvements, address items that are required for ongoing maintenance (roof replacement, boiler replacement, etc.)

| | |
|---|---|
| | <h2>Hamilton Elementary School</h2> <p>1958; Alterations 2005, Additions & Major Renovations 2017</p> |
| | <h2>Crestview Elementary Schools</h2> <p>1955; Additions & Major Renovations 1981, 2014</p> |
| NO SEPARATE GYM/CAF | <h2>Mooreland Elementary School</h2> <p>1958; Alterations 2005, 2022</p> |
| NO SEPARATE GYM/CAF | <h2>North Dickinson Elementary School</h2> <p>1955; Alterations 1989, 2010</p> |
| NO SEPARATE GYM/CAF | <h2>Bellaire Elementary School</h2> <p>2006</p> |
| HIGH RENOVATION COST/SF NO SEPARATE GYM/CAF | <h2>Mt. Holly Springs Elementary School</h2> <p>1955; Alterations 1961, 1989, 2009</p> |
| HIGH RENOVATION COST/SF NO SEPARATE GYM/CAF | <h2>Letort Elementary School</h2> <p>1936; Alterations 1971, 1995, 2009, 2013</p> |

LETORT ELEMENTARY SCHOOL

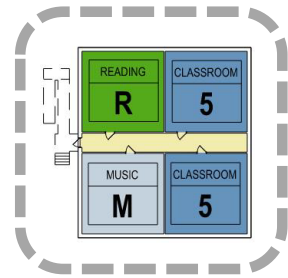
- Original construction: 1936
 - Gym added in 1971
 - Administration suite & 4 classrooms added in 2013 as modular construction
-
- Building has not had a comprehensive renovation since its original construction.
 - Building systems are operating beyond their service life.
 - ADA/accessibility upgrades required throughout the building.
 - Comprehensive renovation cost/ sf would likely exceed the cost of new construction.



MT. HOLLY SPRINGS ELEMENTARY SCHOOL

- Original construction: 1955
 - Alterations in 1961, 1989, 2009
 - Modular classrooms added in 2022
-
- Building has not had a comprehensive renovation since its original construction.
 - ADA/accessibility upgrades required throughout the building.
 - Building systems are within their service life, but based on age & condition will need to be replaced within 6-8 years.
 - Comprehensive renovation cost/ sf could approach or exceed the cost of new construction.

1955



2022

(MODULAR)



ELEMENTARY FACILITIES

Existing Facility Site & Geographic Considerations

| | | |
|---|------------------|--|
| SECOND LARGEST SCHOOL NO EXPANSION | CAPACITY 450 | Hamilton Elementary School |
| LARGEST SCHOOL NO EXPANSION | CAPACITY 550 | Crestview Elementary Schools |
| SPACE FOR EXPANSION | CAPACITY 350 | Mooreland Elementary School |
| SPACE FOR EXPANSION | CAPACITY 300* | North Dickinson Elementary School * WITH VISTA RELOCATION |
| SPACE FOR EXPANSION | CAPACITY 425 | Bellaire Elementary School |
| TIGHT SITE GEOGRAPHICALLY REMOTE | CAPACITY 225 | Mt. Holly Springs Elementary School |
| TIGHT SITE FEMA FLOOD HAZARD ZONE PROPERTY LINE ISSUES | CAPACITY 300 | Letort Elementary School |



CASD PROPERTY

2.24Ac.

LETORT ELEMENTARY SCHOOL

BOROUGH PROPERTY

195-EX

125-EX

East South Street

South Bedford Street

110 E SOUTH STREET

160 E SOUTH STREET

168 E SOUTH STREET

174 E SOUTH STREET

176 E SOUTH STREET

178 E SOUTH STREET

260 E POMFRET STREET

260 E

330.00

300.00

270.00

270.00

30.00

50.00

55.00

40.00

30.00

242.00

242.00

227.00

0.08Ac

55.00

40.00

30.00

49.74

30.00

0.13 Ac

2.79

24.00

25.00

35.00

17.00

43.00

60.00

169 SOUTH STREET

194

193

136

137

138

Questions?



Crabtree, Rohrbaugh & Associates
www.cra-architects.com