



Crabtree, Rohrbaugh & Associates

CONEWAGO VALLEY SCHOOL DISTRICT

DISTRICT-WIDE FEASIBILITY STUDY

FACILITY STUDY UPDATE

April 24, 2023

AGENDA

1 Next Steps

2 Option Development

3 Option 1

4 Cost Estimates



NEXT STEPS

Schedule

NEXT STEPS

1. Board approves Option
2. District adopts planning number based on projected enrollment
3. Verification of Educational Program
4. Revisions, if needed, to Conceptual Design and Cost Estimates
5. Amendment to CRA contract for design services for CTE
6. Begin understanding of site approval process



OPTION DEVELOPMENT

Options align with District's Vision and Educational Program

OPTION SUMMARY

OPTION 1: Renovate Existing Buildings

CTE & NOE	Renovations & Additions to develop equitable schools
CVIS	Limited Renovations
NOMS/HS	Renovations

OPTION 2: One Campus Model

CTE & NOE	New Construction of one K-3 School on Main Campus
CVIS	Limited Renovations
NOMS/HS	Renovations

OPTION 3: One Campus Model

New K-1	New Construction of K-1 Primary School on Main Campus
NOE	Renovations & Additions to convert to 2nd-3rd Grades
CVIS	Limited Renovations
NOMS/HS	Renovations



OPTION 1

Renovate Existing Buildings

SCOPE OF WORK - CTE

Exterior Envelope

- Window Replacement
- Brick repair
- Roof Fascia and Coping Replacement

Interior

- Secure Vestibule
- Renovations to Administration
- Standardize Classroom layouts
- Upgrade Restrooms
- Replace Casework, Doors, Flooring, Ceilings & Painting
- Natural daylight in all classrooms
- Address life safety code requirements (Egress through Library)

•Building Systems

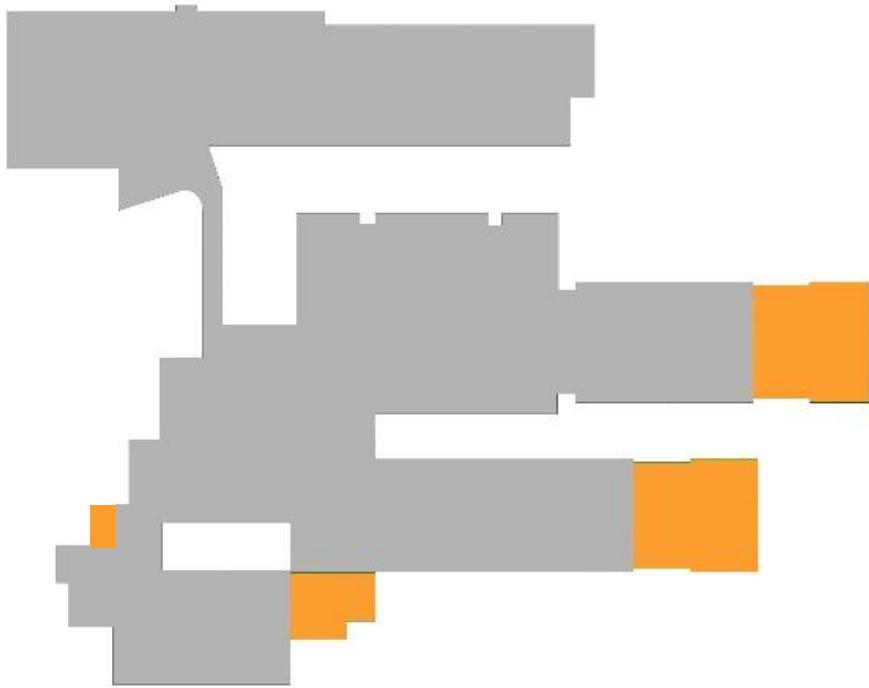
- New HVAC System
- Plumbing, lighting, and electrical upgrades

Building Additions

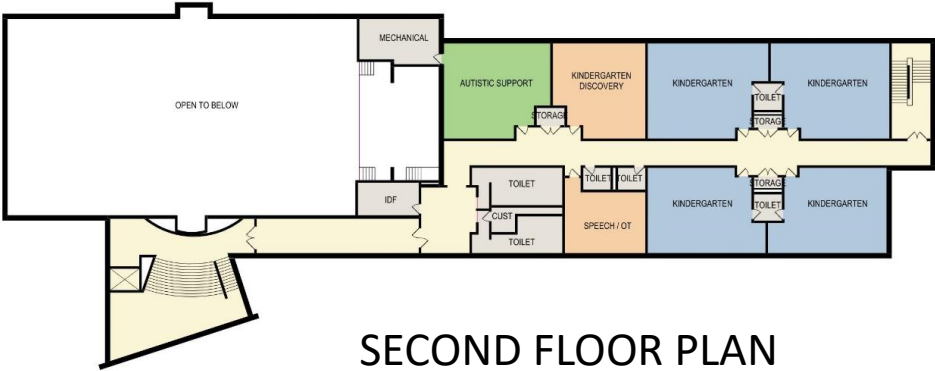
- **6 classroom addition with support spaces**

Site Improvements

- Separation of parent and bus drop-off



PROPOSED PLAN - CTE



SECOND FLOOR PLAN



FIRST FLOOR PLAN



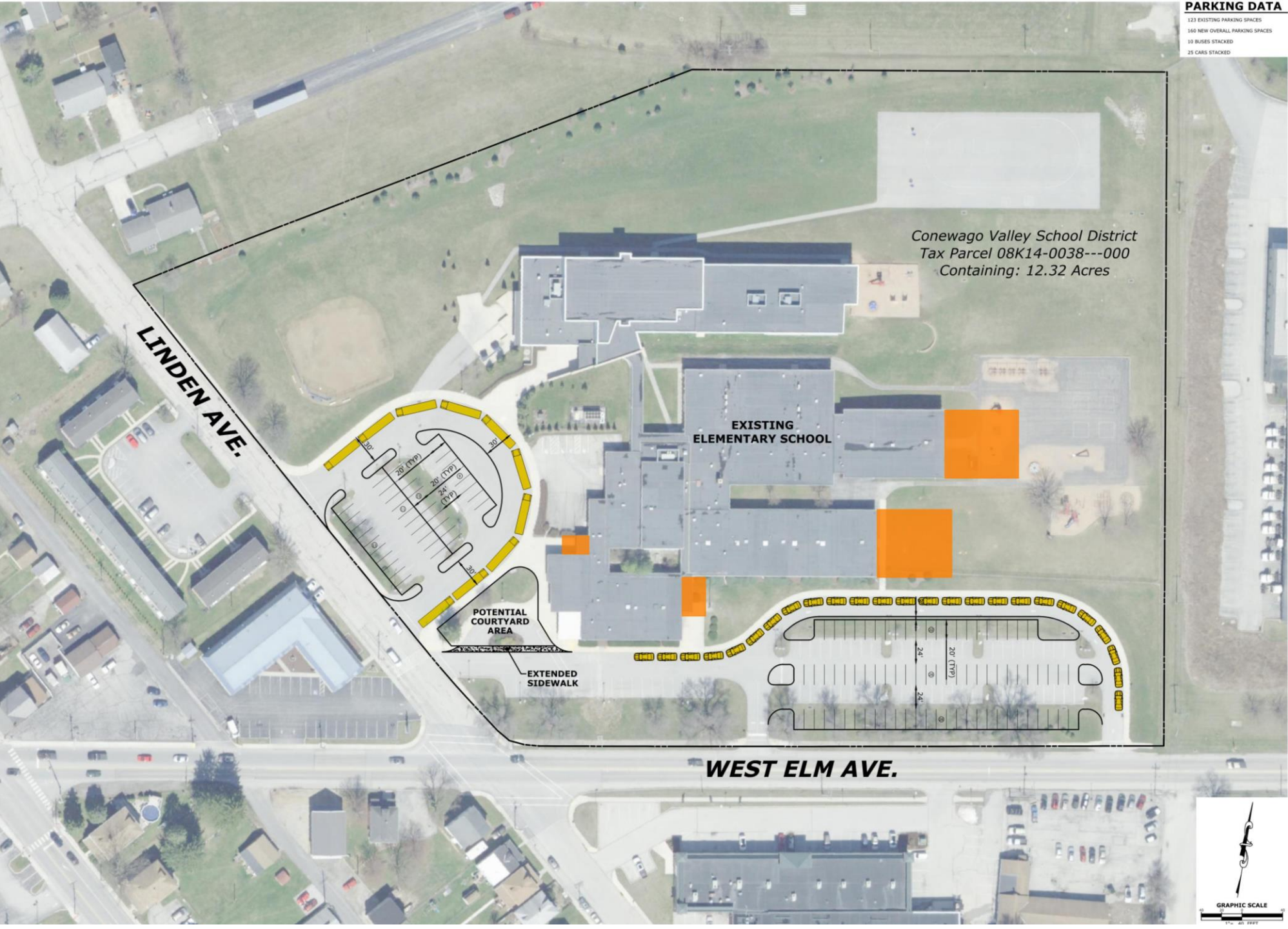
NEW ADDITIONS

PARKING DATA

123 EXISTING PARKING SPACES
140 NEW OVERALL PARKING SPACES
10 BUSES STACKED
25 CARS STACKED

Site Development

- Add 40 new parking spaces
- 10 buses stacked
- 25 cars stacked



Conewago Valley School District
Tax Parcel 08K14-0038---000
Containing: 12.32 Acres

EXISTING
ELEMENTARY SCHOOL

LINDEN AVE.

POTENTIAL
COURTYARD
AREA

EXTENDED
SIDEWALK

WEST ELM AVE.



SCOPE OF WORK - NOE



Building Envelope

- Window replacement
- Roof Mitigation, Fascia & Coping

Interior Finishes

- Flooring repair or replacement
- New Casework & Sinks
- Replace Doors
- ADA compliant Rest Rooms

Building Systems

- New HVAC System
- Replace Automatic Temperature Control system
- Lighting and Electrical upgrades
- Plumbing fixture and piping replacement
- Hot Water Heater
- Dedicated Data Closets

Site Improvements

- Increase Parent Drop-off access drive
- Repair asphalt paving and sidewalks

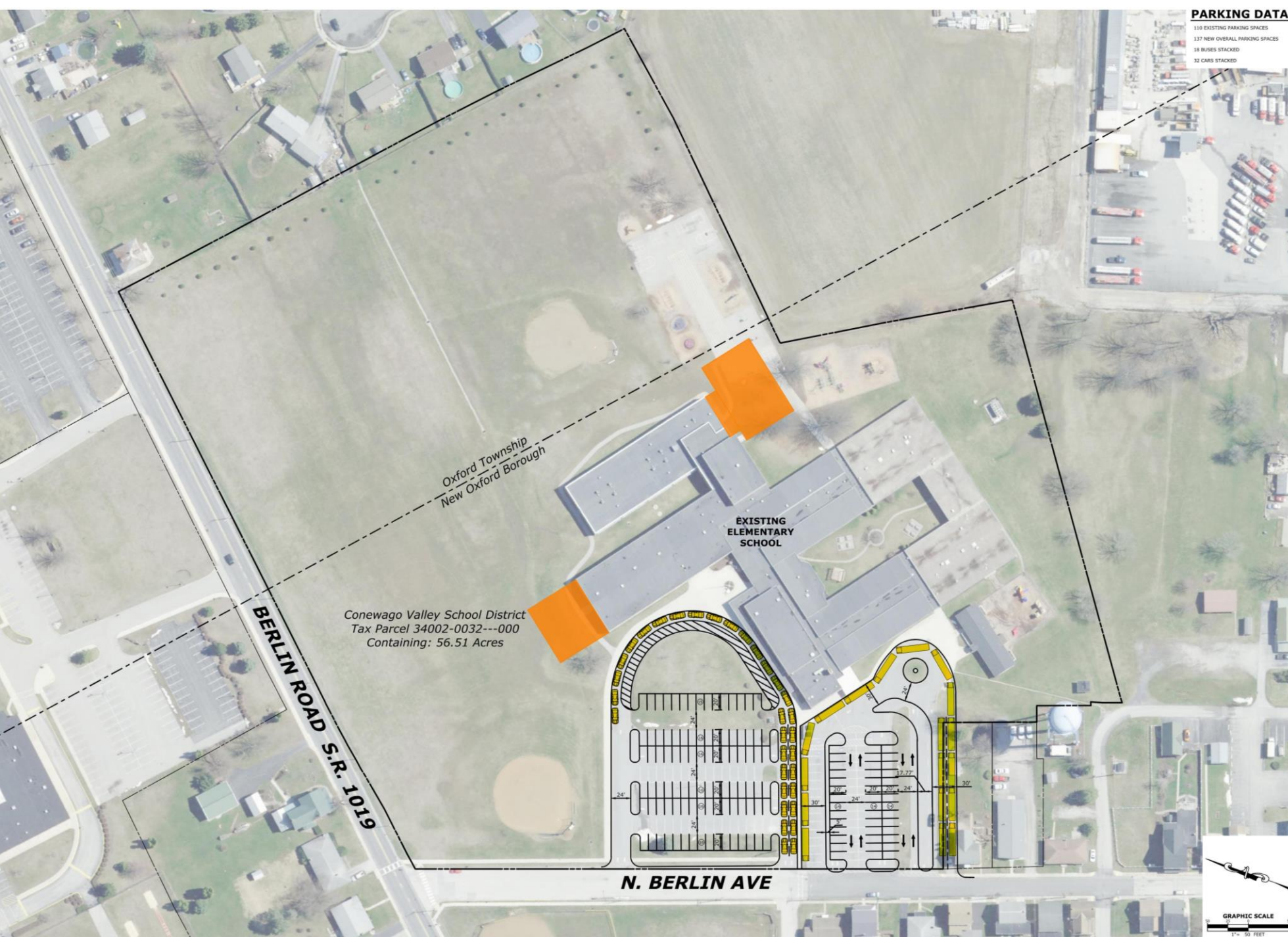
Building Additions

- **New Gymnasium (Base Bid)**
- **8 classroom addition and new toilet rooms**

PROPOSED PLAN - NOE



 NEW ADDITIONS



Site Development

- Relocate bus and parent drop-off
- Add 40 new parking spaces
- 18 buses stacked
- 24-32 cars stacked



COST ESTIMATE

Construction & Total Project Costs

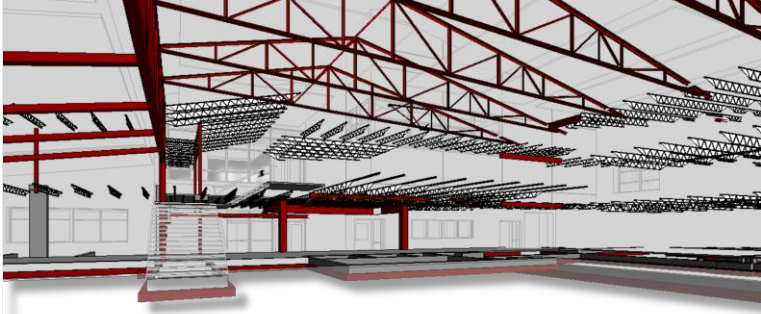
COST ESTIMATE SUMMARY

Option Summary	OPTION 1		OPTION 2		OPTION 3	
	Add/Reno		New K-3		New K-1	
	Low	High	Low	High	Low	High
CTE	\$24.2	\$27.0				
NOE	\$24.0	\$26.9			\$21.7	\$24.4
SUBTOTAL	\$48.18	\$54.0				
New Elementary School			\$77.9	\$81.6	\$41.7	\$43.6
CVIS	\$2.8	\$4.8	\$2.8	\$4.8	\$2.8	\$4.8
MS/HS	\$23.1	\$25.5	\$23.1	\$25.5	\$23.1	\$25.5
TOTAL	\$74.1	\$84.3	\$103.8	\$111.9	\$89.4	\$98.2

**Costs do not include Site Construction Costs*

*** Costs do not include Classroom Modularity (4 Classroom 2 year lease - \$300,000 - \$375,000)*

MANAGING CHANGE ORDERS



CRA Change Order Budgeting

- New Construction: Less than 1%
 - Additions/Renovations: 2-3 %
 - Industry Standards: 4-6%
-
- Experienced Team
 - REVIT Implementation since 2008
 - Comprehensive review to ensure fair value

OPTION 1 COST ESTIMATE - CTE

Conewago Township Elementary				January 23, 2023	
K-3 Additions & Renovations		COST RANGE			
Renovation Construction Costs	50,100 SF	\$ 13,266,123		\$ 14,592,735	
Additions Construction Costs	14,600 SF	\$ 3,790,691		\$ 4,161,000	
New Building Construction Costs		\$ 4,600,909		\$ 5,061,000	
Site Construction Costs					
Escalation & Contingency	13%	\$ 2,217,386	13%	\$ 2,437,986	
Subtotal Construction Costs		\$ 19,274,199		\$ 21,191,721	
Construction Soft Costs	10.0%	\$ 1,927,420	10%	\$ 2,119,172	
Total Construction Costs		\$ 21,201,619		\$ 23,310,893	
Project Soft Costs	14.0%	\$ 2,968,227	16%	\$ 3,729,743	
TOTAL PROJECT COSTS		\$ 24,169,846		\$ 27,040,635	

**Costs do not include Site Construction Costs*

*** Costs do not include Fire Protection System*

CTE OUTLINE SPECIFICATION

CTE RENOVATIONS

General Construction

Roof System:

- Replace roof system and insulation (if needed)
- Replace metal fascia & coping

Exterior Walls:

- Selective masonry repair and brick re-pointing
- Selective masonry cleaning at Kindergarten addition

Interior Partitions:

- New partitions in areas of major renovation – 8” painted cmu

Doors and windows:

- New operable aluminum windows
- New aluminum storefront system and doors
- New hollow metal doors and frames in service areas

Interior doors:

- New solid core wood doors (if needed)

Hollow metal door frames:

- Replace and/or repair/repaint hollow metal frames

Fire and smoke separations:

- As where required by code

Security separations:

- Locations to be confirmed with owner
 1. Secure Vestibule @ new Administration area

Acoustic separations:

- To be determined with owner
 1. Music?

Finishes

Corridors:

- Floors – existing Terrazzo tile patch and repair as required. OR New LVT or porcelain tile over existing terrazzo tile. Existing VCT replacement TBD.
- Walls – Existing decorative wainscot and brick veneer to remain. Block and plaster to be painted.
- Ceilings – new acoustical ceiling tile

Classrooms:

- Floor – New carpet and/or LVT
- Walls – Walls to be painted
- Ceilings – New acoustical ceiling tile

Media Center:

- Repurpose existing Multi-Purpose Room.

CLA:

- Repurpose existing Media Center

Restrooms:

- Floor – New ceramic tile or resinous flooring and base
- Walls – Painted

- Ceilings – New acoustical ceiling tile

Administration/Guidance/Nurse:

- New Administration Area

Kitchen:

- New flooring TBD

Multi-Purpose Room:

- New finishes TBD

Miscellaneous Specialties:

- New fire extinguisher cabinets
- New building signage
- New projection screens where needed
- New writing and visual display boards
- Visual display – new writing and visual display boards in classrooms
- New toilet compartments
- New toilet accessories

Equipment:

- New stage curtains TBD
- Casework – new casework in classrooms with plastic laminate/corion countertops
- Library shelving and furniture – new furniture and wood shelving TBD
- Building furniture and moveable equipment – desks, chairs, tables, etc to be provided by owner
- Music storage and equipment – storage requirements to be verified with program instructor
- Kitchen Equipment – TBD

HVAC

System:

- Consider alternative approaches to the HVAC to improve filtration and ventilation.
- Further test and evaluate HVAC piping system and replace valves.
- Provide air conditioning and ventilation in the corridors.

Automatic Temperature Control:

- Upgrade ATC system to meet current standards.

Plumbing

Sanitary Sewer System:

- Camera the older piping to verify condition of pipe below grade.

Domestic Water System:

- Test the piping to determine the internal condition.
- Replace old valves to allow for zoned system maintenance and service.

Domestic Water Heater:

- Upgrade the older domestic hot water plant.

Plumbing Fixtures:

- Replace older fixture fittings.
- Upgrade to ADA where applicable.

Sprinkler System:

- Consider adding sprinklers based on future use and needs.

Electrical

Electrical Distribution System:

- None

Emergency Power:

- Rework the emergency power distribution to include two transfer switches and separate panels for life-safety power and optional emergency loads.

Lighting

- New automatic lighting controls should be provided from a system-wide approach. Any renovation project will require this to meet the energy code

Power

- Replace or refinish surface raceway that has deteriorated.

Data/Communication/Technology

- Provided dedicated spaces with cooling for data racks.

Fire Alarm

- Expansion required for new additions

Security

- Card access and CCTV required for new additions.

OPTION 1 COST ESTIMATE - NOE

New Oxford Elementary				Date: 1/23/2023	
K-3 Renovations & Gymnasium Addition		COST RANGE			
Renovation Construction Costs	68,600 SF	\$ 11,196,091		\$ 12,323,200	
Additions Construction Costs	16,000 SF	\$ 4,279,273		\$ 4,720,000	
MEP Renovation Construction Costs	SF	\$ 1,183,636		\$ 1,302,000	
Site Construction Costs					
Escalation & Contingency	13%	\$ 2,202,525		\$ 2,426,996	
Subtotal Construction Costs		\$ 19,145,025		\$ 21,096,196	
Construction Soft Costs	10.0%	\$ 1,914,503	10%	\$ 2,109,620	
Total Construction Costs		\$ 21,059,528		\$ 23,205,816	
Project Soft Costs	14.0%	\$ 2,948,334	16%	\$ 3,712,930	
TOTAL PROJECT COSTS		\$ 24,007,861		\$ 26,918,746	

**Costs do not include Site Construction Costs*

*** Costs do not include Fire Protection System*

****Roof Deck Asbestos Abatement – 28,000 SF Estimated Roof replacement cost \$725,000 - \$850,000*

(costs does not include asbestos abatement or temporary facilities)

NOE OUTLINE SPECIFICATION

NOE RENOVATIONS

General Construction

Hazardous Material Assessment:

- Asbestos Abatement

Roof System:

- Replace roof system and insulation (if needed)
- Replace metal fascia & coping

Exterior Walls:

- Selective masonry repair and brick re-pointing

Interior Partitions:

- New partitions in areas of major renovation – 8” painted cmu

Doors and windows:

- New operable aluminum windows
- New aluminum storefront system and doors
- New hollow metal doors and frames in service areas

Interior doors:

- New solid core wood doors (if needed)

Hollow metal door frames:

- Replace and/or repair/repaint hollow metal frames

Fire and smoke separations:

- As where required by code

Security separations:

- Locations to be confirmed with owner
 1. Administration

Acoustic separations:

- To be determined with owner
 1. Music?

Finishes

Corridors:

- Floors – existing Terrazzo patch and repair as required. New LVT or porcelain tile in areas of extensive work
- Walls – Existing decorative wainscot and brick veneer to remain. Block and plaster to be painted.
- Ceilings – new acoustical ceiling tile

Classrooms:

- Floor – New carpet and/or LVT
- Walls – Walls to be painted
- Ceilings – New acoustical ceiling tile

Media Center:

- Repurpose existing Multi-Purpose Room.

CLA:

- Repurpose existing Media Center

Restrooms:

- Floor – New ceramic tile or resinous flooring and base
- Walls – Painted
- Ceilings – New acoustical ceiling tile

Administration:

- New finishes TBD

Kitchen:

- New flooring TBD

Cafeteria:

- Floor – new LVT or porcelain tile
- Stage – Wood floor to be refinished
- Walls – Existing walls to be painted
- Ceilings – new acoustical tile ceiling

Miscellaneous Specialties:

- New fire extinguisher cabinets
- New building signage
- New projection screens where needed
- New writing and visual display boards
- Visual display – new writing and visual display boards in classrooms
- New toilet compartments
- New toilet accessories

Equipment:

- New stage curtains
- Casework – new casework in classrooms with plastic laminate/corion countertops
- Library shelving and furniture – new furniture and wood shelving
- Building furniture and moveable equipment – desks, chairs, tables, etc to be provided by owner
- Music storage and equipment – storage requirements to be verified with program instructor
- Kitchen Equipment – TBD

HVAC

HVAC System:

- New HVAC system to permit direct humidity control and improve filtration and ventilation.
- Further test and evaluate HVAC piping system and replace valves.
- Install new HVAC in the gymnasium.
- Provide air conditioning and ventilation in the corridors.
- Upgrade ATC system to meet current standards.

Plumbing

Sanitary Sewer System:

- Piping replacement

- Rework the drain lines serving the 1985 classroom sinks.
- Add floor drains in the gang toilet rooms.

Domestic Water System:

- Test the piping to determine the internal condition.
- Replace old valves to allow for zoned system maintenance and service.

Domestic Water Heater:

- Replace the older water heater and storage tank.
- Replace the mixing valve.

Plumbing Fixtures:

- Replace older fixtures and fittings; toilets, sinks, water coolers, hose bibs, etc.
- Upgrade to ADA where applicable.

Sprinkler System:

- Consider adding sprinklers based on future use and needs.

Electrical

Electrical Distribution System:

- None

Emergency Power:

- None.

Lighting

- New automatic lighting controls should be provided from a system-wide approach. Any renovation project will require this to meet the energy code.
- The parking lot lighting should be evaluated while dark. Additional poles may be required for a better quality of lighting.

Power

- Classrooms have an adequate number of receptacles. Devices were added with surface raceway.
- Ground-fault type receptacles are present where required.
- No work required unless additional receptacles needed.

Data/Communication/Technology

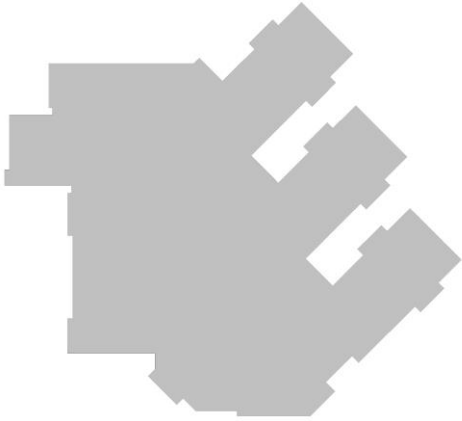
- The Cafeteria sound system should be removed if not being used.
- The projector in the gym is not protected from balls. A protective cage is suggested.
- Provided dedicated spaces with cooling for data racks.

Fire Alarm

- Expansion required for new additions

Security

- Card access and CCTV required for new additions.



Building Exterior

- Roof repair or replacement

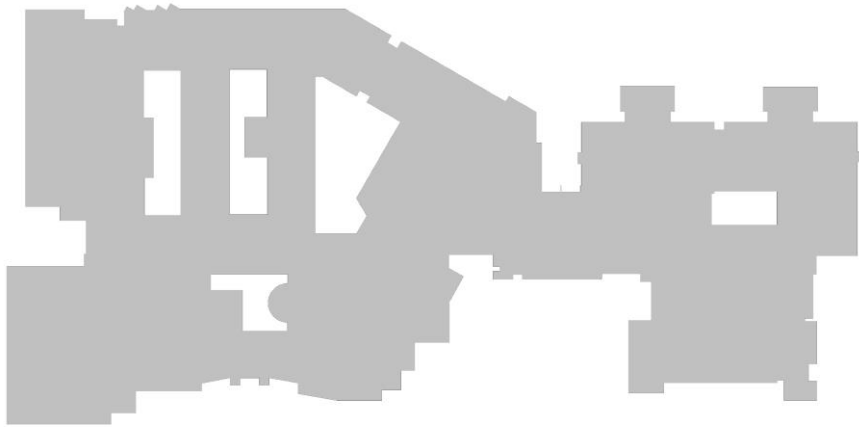
Interior Finishes

- Window Treatment replacement

Building Systems

- Replace Automatic Temperature Control system
- Replace Power Transfer Switch
- Replace Sanitary Sewer Lift Station

NOMS



Building Envelope

- New Doors and Windows
- Dock Repairs/Replacement

Interior Finishes

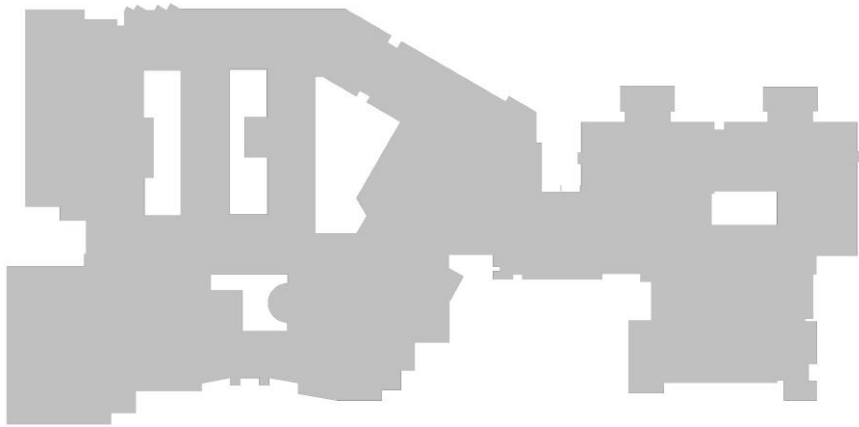
- New Casework
- New Whiteboards

Building Systems

- A/C in Corridors
- Electrical upgrades
- Plumbing Fixture replacement
- Fire Alarm System upgrades
- Dedicated Data Closets

Site Improvements

- Asphalt Paving and Sidewalk repairs
- Improvements to drop-off drive-ways
- Additional Parking



Interior Finishes

- New Casework
- Upgrade Locker Rooms

Building Systems

- A/C in Corridors
- Electrical upgrades
- Plumbing fixture and piping replacement
- Fire Alarm System upgrades
- Dedicated Data Closets
- Hot Water Heater
- Auditorium House Lights

Site Improvements

- Asphalt Paving and Sidewalk repairs
- Improvements to drop-off drive-ways
- Additional Parking

Questions?



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