

CARL A. NELSON & CO.

**NELSON**

Building Solutions Since 1913



# Shenandoah High School

CONSTRUCTION BUDGET PRESENTATION

7/22/2019

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# Overview

- Project Definition
  - Budget Basis
  - Renovations
  - Independent Renovations
  - Additions & Repurposing
  - Project Delivery
  - Schedule
- Scope Details
- Budget Details
- Initial Value Engineering Items
- Possible Sources of Funding

# Project Definition

- Budget Basis
- Renovations
- Independent Renovations
- Additions & Repurposing
- Project Delivery
- Schedule

## Budget Basis

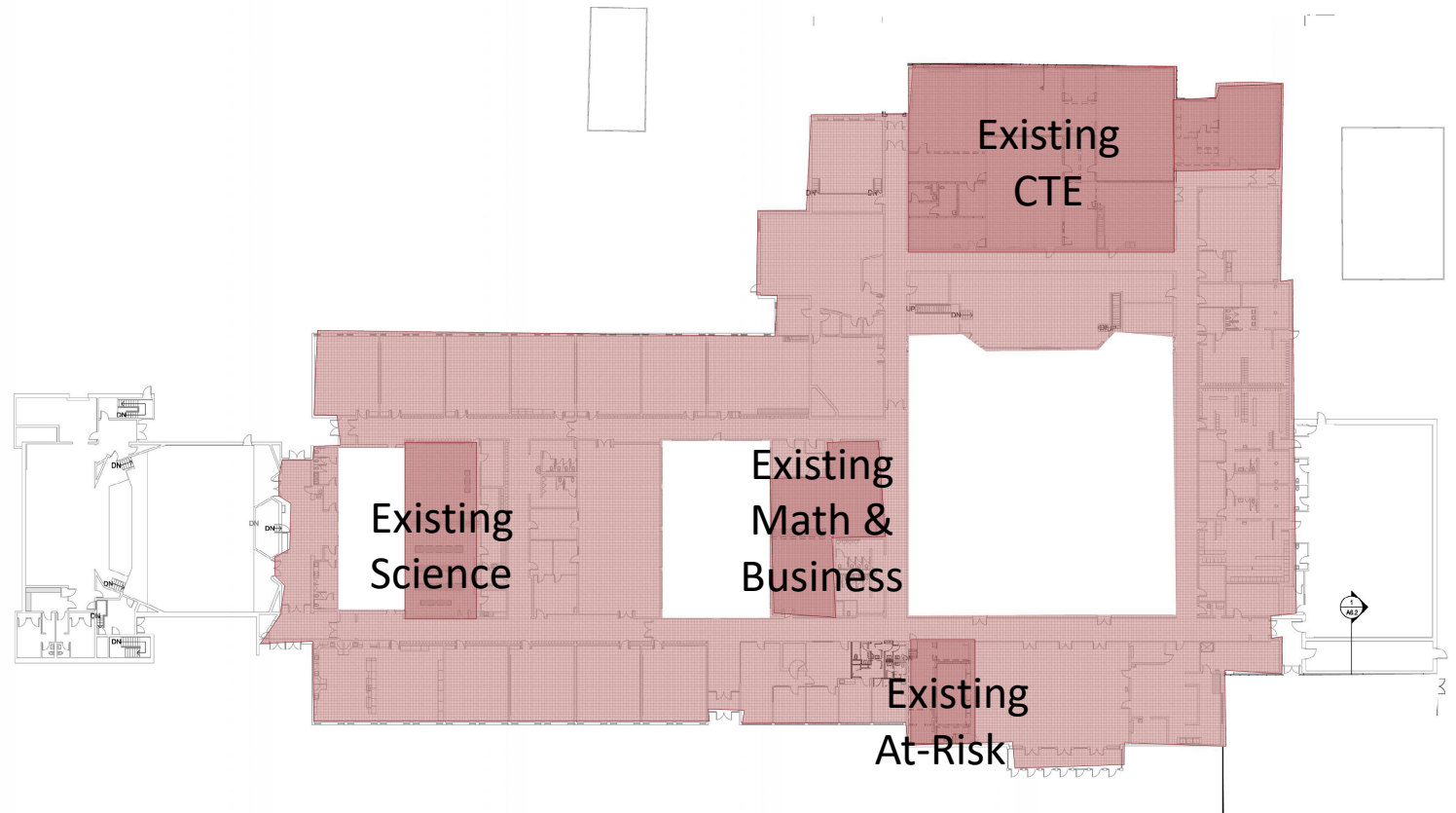
- Schematic Design Project Submittal prepared by DLR .
- Schematic Design Drawings prepared by DLR
- Schematic Schedule dated July 22, 2019
- Design meeting discussions and various e-mail clarifications.
- The scope described herein.

# Project Definition

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## Renovations

Upgrades to the existing building that do not change the function of the spaces, need to be grouped together and include the highest renovation priorities.



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## Independent Renovations

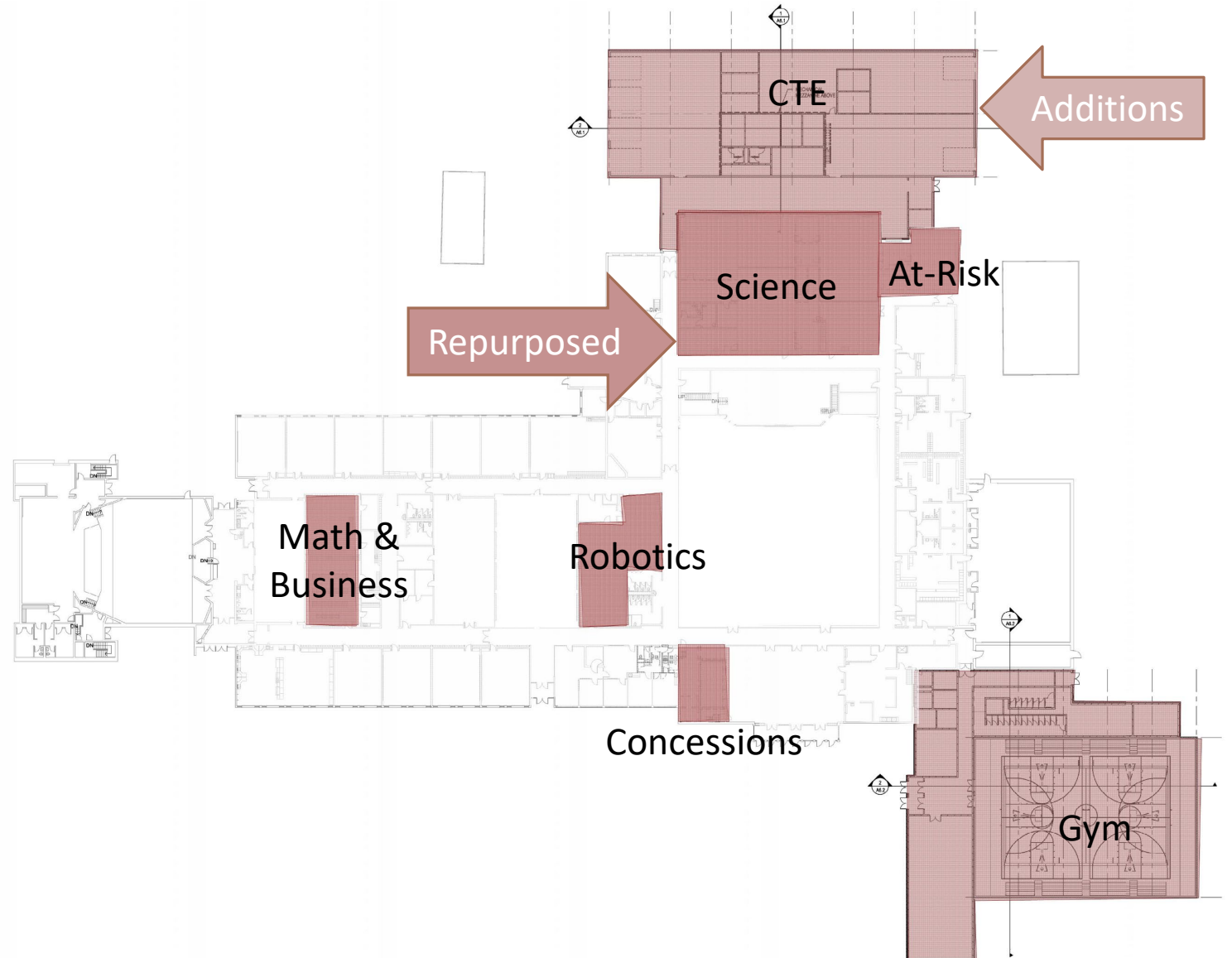
Renovations that can be completed independent of each other and the main renovation scope and are of lower priority.

- New Doors and Hardware
- Interior Painting
- New Floor Finishes
- Minor Exterior Repairs
- Add Security Cameras
- Renovate Reception Area to make ADA compliant
- Modify and Repair Parking Lot

# Project Definition

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## Additions and Repurposing

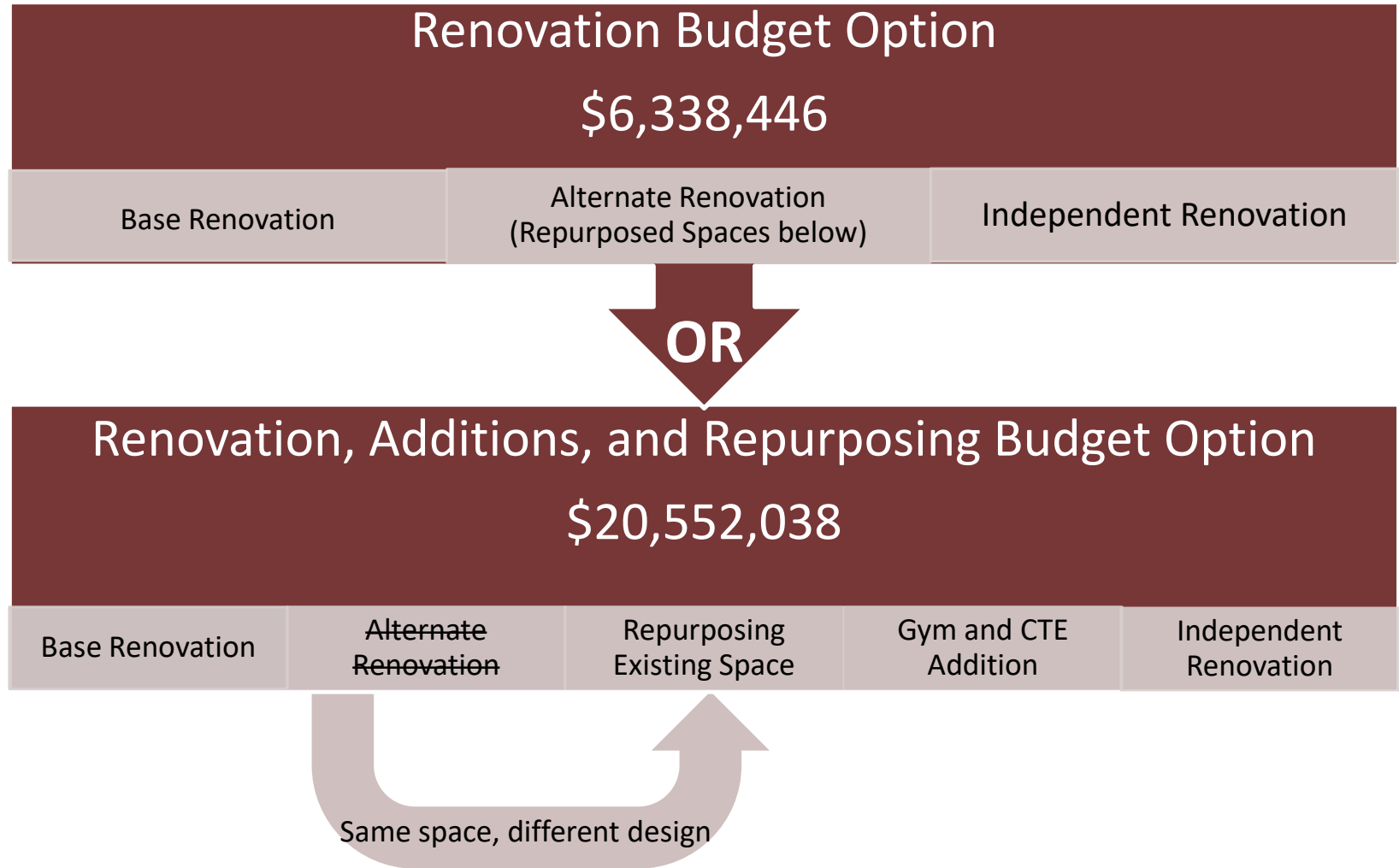


# Project Definition

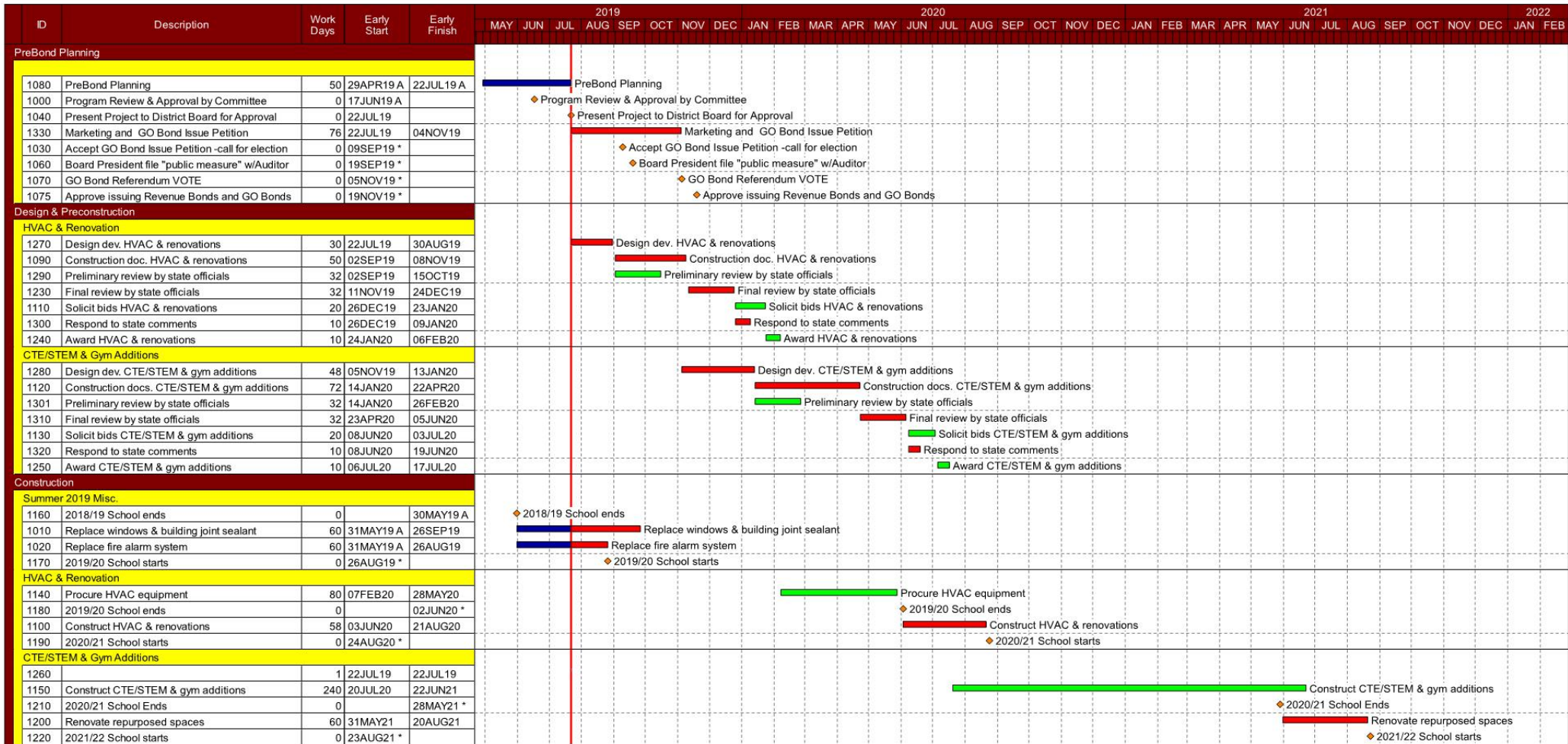
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## Project Delivery

### Two Project Budgets Options



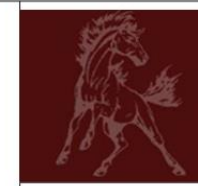




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Number/Version	04



### Shenandoah Community School District High School Renovation and Addition Project Schedule



- Early bar
- Progress bar
- Critical bar
- Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point



# Scope Details

- Renovation
- Independent Renovation
- Repurpose Areas
- CTE and Gym Additions

## Renovation Project

### Upgrading HVAC

- New fresh/exhaust air systems
- New chillers, boilers and hydronic pumps
- Existing science room fume hoods
- Modernize controls

### Energy Efficiency and Technology

- Furred out and insulated exterior walls
- LED lighting
- New data closet and infrastructure
- Two convenience outlets per classroom
- New intercom system

### ADA

- New platform lift in auditorium
- ADA staff restrooms
- ADA compliant interior rooms signs
- ADA compliant ramps from parking lot to the building.

### Safety and Esthetics

- Replace ceiling tile through-out
- New ceiling tile and grid in corridors and auditorium lobby
- Add access control to the auditorium
- New shower fixtures in locker rooms.

# Scope Details

- Renovation
- Independent Renovation
- Repurpose Areas
- CTE and Gym Additions

## Independent Renovation Project

### Doors and Hardware

\$136,891

- All new interior wood doors
- Reusing existing door frames
- New ADA compliant hardware

### Interior Paint

\$207,596

- Paint all interior walls (including the gym)
- Paint existing door frames.

### Floor Finishes

\$405,203

- Asbestos test and abatement
- Repair existing floor expansion joints
- New VCT, carpet, resilient flooring and wall base.

### Exterior Repairs

\$23,031

- Soffit and gutter repair
- Repair rusted exterior doors and repaint

### Digital Upgrades

\$23,031

- Replace 25 analog cameras

### Reception Area

\$13,697

- Demo built-in counter (not ADA compliant)
- Replace counter with furniture and cubicles

### Parking Lot

\$588,799

- Remove islands
- Selective demo and repair (44,000 SF)
- Cutting curb to allow water to drain away

# Scope Details

- Renovation
- Independent Renovation
- Repurpose Areas
- CTE and Gym Additions

## Repurpose Areas

### Science Rooms

- Relocate two science rooms to the current CTE space
- Add one science room

### Math and Business Classrooms

- Relocate Math and Business classrooms to where the science classrooms use to be.

### Robotics

- Add a new robotics classroom where the Math and Business classrooms used to be.

### At-Risk Classroom

- Relocate At-Risk classroom

### Concession Area

- New concession area where At-Risk classroom use to be.
- Lower floor so it is fully accessible.

# Scope Details

- Renovation
- Independent Renovation
- Repurpose Areas
- CTE and Gym Additions

## CTE and Gym Additions

### CTE Addition

- Pre-engineered metal building 13,000 SF
- Conventional construction 3,300 SF
- Mechanical mezzanine 1,900 SF
- Ag, woods, construction, automotive (6 bays) and welding labs

### Gym Addition

- Pre-engineered metal building 9,900 SF
- Conventional construction 8,000 SF
- Gym, fitness center, new restrooms, changing rooms, storage and mechanical rooms

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Pre-Engineered Metal Building (PEMB) Concept  
Structurally reinforced vapor barrier walls and ceiling.



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# Budget Details

## Budget Risk Management

Active Collaboration between School, Construction Manager and A/E during design.

Construction Manager updates budget and at Schematic, Design Development and 90% Construction Document milestones.

Monthly schedule updates during design and construction.

### *Anticipated Variation for Design and Estimating*

Construction Cost +/- 15%

Furniture, Fixtures & Equipment (FFE) +/- 15%

Technology Systems +/- 15%

*Design and Estimating Contingencies (Preconstruction) = 15%*

### *Anticipated Construction Variation & Contingency*

Renovation and Repurposing = 10%

Additions = 5%



# Budget Details

## Existing Building

- Construction cost \$5,581,068
- 63,400 SF renovated
- \$88/SF

## Renovation + Independent Renovation Budget

Development Costs	\$2,502
Renovation Construction	\$4,192,538
Professional Fees and Expenses	\$696,403
Administrative and Legal	\$12,474
Furniture, Fixtures & Equip.	\$0
Technology Systems	<u>\$46,000</u>
<b><i>Subtotal Renovation</i></b>	<b><i>\$4,949,917</i></b>
Independent Renovation	<u>\$1,388,530</u>
<b>Total Renovation</b>	<b>\$6,338,447</b>
Included contingency	\$884,279

*More detail on page 9 of report.*

# Budget Details

## CTE Addition

- Construction Cost \$3,516,242
- 18,200 SF addition
- \$193/SF

## Repurposing

- Construction Cost \$1,870,803
- 14,100 SF repurposed
- \$133/SF

## Gym Addition

- Construction Cost \$3,650,409
- 17,900 SF addition
- \$204/SF

## Renovation + Independent Renovation + Repurposing + Additions Budget

Renovation Budget	\$4,949,916
Renovation Savings	<u>(\$469,814)</u>
<i>Subtotal Renovation</i>	<i>\$4,480,102</i>
CTE Addition	\$5,885,296
STEM Repurposing	<u>\$2,857,084</u>
CTE + STEM Subtotal	\$8,742,380
Gym Addition	<u>\$5,941,026</u>
<i>Subtotal Repurpose and Additions</i>	<i>\$14,683,406</i>
<i>Subtotal Repurpose, Additions &amp; Renov.</i>	<i>\$19,163,508</i>
<i>Independent Renovation</i>	<u><i>\$1,388,530</i></u>
<b>Total</b>	<b>\$20,552,038</b>
Included contingency	\$3,428,836

*More detail on page 11 of report.*

# Initial Value Engineering Items

VE 1. Cost of seeding in lieu of sodding disturbed areas.

VE 2. Reuse the current unit ventilators for outdoor air if the retro-commission effort demonstrates that this is a workable solution. No new DOAS system, no removal of ceiling grid but still new ceiling tile everywhere. This will be studied in the design development phase and after the retro-commissioning is complete.

VE 3. Reduce width of corridor at CTE or reinforce structure of existing building which will be studied in the design development phase.

VE 4. Deleting the additional insulation in existing exterior walls which will be studied in the energy efficiency evaluation phase.

VE 5. Skylights vs other options will be studied in the design development phase.

VE 6. Emergency lights powered by generator instead of batteries, if capacity is available. Will be an add, but will save maintenance time. This will be studied in the design development phase.

VE 7 Evaluate the code requirements for a fire sprinkler system in the new CTE addition.

# Possible Sources of Funding

- Proceeds from SAVE Bonds (11 Years) \$5,285,440
- Proceeds from General Obligation Bonds
- Cash Flow from SAVE
- Cash Flow from PEPL
- E-Rate Funds
- Private Donations
- General Funds
- Career Academy Grant
- Regional Planning Partnership (RPP) Grant – CTE equipment
- Other Grants
- Utility Rebate
- Interest on bond proceeds before spent