

Steel Center for Career and Technical Education

Update to the 2018 Facilities Improvement Study



© July 20, 2021

360°



#4167

	<u>Page</u>
Executive Summary.....	1
 Steel Center for Career and Technical Education:	
Building Improvement Observations and Recommendations	6
Existing Site and Floor Plans	17
Proposed Site and Floor Plans	21
 Power House:	
Building Improvement Observations and Recommendations	24
Existing Floor Plans	27
 Mon Valley School:	
Building Improvement Observations and Recommendations	28
Existing Site and Floor Plans	37
Proposed Floor Plans.....	40
 Budget Summary and Options Comparison:	
Steel Center / Power House Options	42
Mon Valley School Options	43
Combined Building Options Totals.....	44
 Appendix:	
Summary of Industry Advisory Committee Meetings (#1- #14)	

The Steel Center for Career and Technical Education retained HHSDR in March 2021 to update the 2018 Facilities Improvements Study. Specifically, this 2021 report updates the 2018 cost estimates, and incorporates the needs of the career programs.

Cost Estimating

The 2018 study contained cost estimates for Code Required/Safety Improvements and Building Infrastructure Improvements for Steel Center, the Power House and the Mon Valley School. Those cost estimates have been revised in this Update, as have the priority level of the improvements.

Priority Level designations are assigned scores based on the following projected time periods for the improvement to take place.

- Priority 1 : Immediate Need
- Priority 2 : 3 - 5 Years / Approaching Need
- Priority 3 : 5 - 8 Years / Moderate Need
- Priority 4 : 8 - 12 Years / Eventual Need

In August 2019, Steel Center's administration prepared a report entitled "*Steel Center Reimagined: A Plan for Change 2019/2020 through 2020/2021*". This timely document summarized the information provided by HHSDR in the 2018 Facilities Improvement Study, including whether it agreed with the Priority Level assigned for each improvement. This input was also considered in this updated report.

Costs identified in this Study are estimated construction costs only, based on historic industry trends and recent bid history of similarly scoped projects. Construction costs do not include additional project fees, such as design, engineering, permitting, approvals, advertising, etc.

New Programs since 2018

The Steel Center Reimagined Report identified four (4) new programs or modifications to existing program, all of which have been approved and placed in service, as follows:

1. New CIP Code 51.2606 "Rehabilitation Aide", PA Career Cluster: Health Science
2. New CIP Code 51.0808 "Veterinary/Animal Health Technology/Technician/Veterinary Assistant", PA Career Cluster: Health Science
3. Modifications to CIP Code 51.0899 "Health/Medical Assisting Services Other", moving from two instructors to one, PA Career Cluster: Health Science
4. New CIP Code 51.9999 "Healthcare Technology", PA Career Cluster: Health Science

Additionally, HHSDR participated in a series of meeting with each Program of Study to understand their specific program needs. The results of these meetings are summarized below.

Steel Center Programs of Study – Proposed Needs

The current programs of study and the general comments received at our individual meetings with the instructors, industry partners and Steel Center administrators are as follows.

1. Advertising & Design (CIP Code 50.0402)

A dedicated Photo Lab space is desired.

2. Automotive Technology (CIP Code 47.0604)

This program is one of several that could benefit from the additional space which exists at the adjoining School Building Maintenance department. Other needs include: additional LED lighting, increased electrical power, additional storage space, improved heating, renovated toilet rooms and additional natural lighting, perhaps by replacing garage door panels with opaque panels.

3. Baking/Pastry Chef (CIP Code 12.0501) and Culinary Arts (CIP Code 12.0508)

This program shares training and practicum space, and both instructors desire a complete redesign which highlights and expands the restaurant / café and provides retail opportunities. Other needs include: new coolers and freezers, larger locker rooms, laboratories and classrooms.

4. Building Trades and Maintenance (CIP Code 46.0401)

The activities taking place in this space require new dust collection and air filtration systems. Dust has clogged floor drains and sinks, which now require replacement. Programmatically, a partition in the classroom should be removed, a new window installed between the classroom and trades areas, and a new fenced-in area created outside. This program also requires additional power.

5. Carpentry (CIP Code 46.0201)

Classroom size could increase with a reduction in the size of the locker room.

6. Collision Repair and Refinishing (CIP Code 47.0603)

No program changes impacting the space were suggested by industry partners.

7. Computer Technology (CIP Code 15.1202)

By repurposing the space, an additional classroom can be created. Lighting levels in the space are requested to be reduced, and natural light introduced by means of a new window. Increased electrical power is also needed.

8. Cosmetology (CIP Code 12.0401)

This program would like to increase visibility to the Lobby with a relocated Spa/Hair Salon. New workstations are planned for installation. Larger labs and classroom with more natural light are desired. New two-tier lockers are preferred in larger / updated locker rooms.

Steel Center Programs of Study – Proposed Needs (continued)

9. Diesel Technology (CIP Code 47.0613)
Additional space is needed as this program instructional area is undersized compared to industry standards. The space should also be redesigned to create angular parking and allow for installation of two heavy lift and two medium lift hoists. Hydraulic hose tools and a new hydraulic trainer are also desired.
10. Electrical Construction (CIP Code 46.0399)
An underground burial area for training is requested at the rear of Lab 108. The existing wash fountain should be replaced with a new stainless steel sink.
11. Health Assistants (CIP Code 51.0899)
This new program requires updated countertops and cabinets, and a new phone line in the Lab. A complete redesign of its assigned space should include a new window between the classroom and lab.
12. Heating, Ventilation, Air Conditioning & Refrigeration (CIP Code 47.0201)
This program requires complete replacement of plumbing lines and handwashing stations. New eyewash stations are required. Existing workstations in lab are undersized, which requires additional space for storage and instruction.
13. Public Safety (CIP Code 51.0904)
Vehicular storage, regular storage and locker space are needed, within their current lab space. A new girls locker room is required. Toilet rooms should be enlarged to meet ADA standards.
14. Welding (CIP Code 48.0508)
Recommended improvements include new LED lighting on relocated fixtures, drop down hoses and hoods for each booth, new slatted-type welding curtains and a new outdoor welding booth.
15. Medical Professions (CIP Code 51.9999)
This new program will likely require a larger classroom with changing rooms for 50 girls and 12 boys. Pharmaceutical Tech & Phlebotomy instruction requires cabinets and a countertop with sink. An exam room with five patient beds in open lab and a small storage room are required.
16. Veterinary Assistant (CIP 01.8301)
Direct access to the outside is needed for this new program, to avoid using the vestibule. A location near the main entrance is preferred to permit visitors access to the Pet Daycare functions.

Power House

The 2018 and this updated study identified this building's needs as follows.

1. Building Infrastructure Improvements - General Construction

The exterior of the building requires new metal panels, which have deteriorated, and repair/repointing of brick and mortar joints. The lower level man door should be replaced, and handrails should be cleaned and repainted.

2. Building Infrastructure Improvements - Heating/Ventilating/Air Conditioning systems

At the time, a major recommendation was made to convert the steam boilers to hot water. This would require new hot water piping to be installed to both Steel Center and Mon Valley School, and new hot water pumps and drives. Alternatively, if the conversion does not take place, the steam piping to Steel Center needs to be replaced due to its poor condition in all buildings.

The existing back-up chiller requires replacement, as does the air handling unit in the chiller room. Chilled water pumps should be replaced and converted to a variable primary chiller pumping arrangement.

3. Building Infrastructure Improvements - Electrical systems

Any HVAC modifications described above will require associated electrical work. The building's exterior wall mounted lighting and exit signs should be replaced with LED. A new diesel-fired generator is required. Electrical distribution equipment should be replaced.

Mon Valley School

The 2018 and this updated study identified this building's needs as follows.

1. Code Required/Safety Improvements

Toilet rooms, doors and door hardware, stair railings, signage and the elevator do not meet current ADA and/or safety code standards. Plumbing fixtures and pressure reducing valves are also not code compliant. The fire alarm needs to be upgraded, and Areas of Rescue do not exist in the building.

2. Building Infrastructure Improvements

The site has pavement and sidewalk repair needs. The building envelope, including roof system, exterior metal panels and masonry walls, have varying needs. Selected window replacement should occur. Interior finishes (paint, ceilings, flooring, gym pads) need to be replaced. The therapeutic pool ceramic tile is deteriorating and requires full replacement including the gutter system and filtration equipment.

The HVAC system is original to the building, and several system components should be replaced, including temperature controls, air handling units, terminal heating equipment and all piping. Ductwork should be repaired and cleaned. Several Plumbing components likewise should be replaced. Electrical needs include LED lighting, PA system, branch circuits, data cabling, and distribution equipment.

3. Educational Program Improvements

Classrooms require updated audio / visual technology; first floor classrooms should have more windows for natural lighting. Classroom cabinets and shelving are original and not ADA-compliant. Selected food service equipment requires replacement. The air compressors need to be replaced in the shop labs.

STEEL CENTER CAREER AND TECHNICAL SCHOOL

565 North Lewis Run Road, Jefferson Hills, PA, 15025

CONSTRUCTION

HISTORY:

1977 originally constructed
2007 Alterations to Cosmetology
2007 Roof Replacement
2010 Loading Dock Repairs
2012 Miscellaneous Energy
Improvements (windows, low-
flow plumbing fixtures, lighting
controls, exterior caulking)
2013 Entry Vestibules Improvements
2019 Campus Entrance Drive pavement/
Storm inlet replacement



SIZE:

133,275 square feet on 55.5 total acres

1. CODE REQUIRED / SAFETY IMPROVEMENTS:

General Construction:

1. Locker room / changing rooms in instructional shops/labs, gang, and single-user restrooms throughout building do not meet today's accessibility requirements. Floor clearances and turning areas are not sufficient to accommodate a disabled individual within the spaces. Plumbing fixtures and toilet accessories heights and locations are also not compliant. Many labs only have one self-contained locker room for student use and lack separate changing facilities for boys/girls.

Renovate all building restrooms to provide adequate clearances for handicap; replace plumbing fixtures and accessories. Consider shared changing rooms and for multiple labs and separate boys/girls changing rooms in larger labs to provide gender equity and meet ADA guidelines.

Priority Level (1-4): 3

Estimated Cost:

\$980,000 - \$1,030,000

2. Classroom and office entrance doors are not compliant with ADA guidelines indicating required clearances from adjacent wall proximities.

Modify door entrances to meet ADA requirements.

Priority Level (1-4): 3

Estimated Cost:

\$96,000 - \$121,000

3. The Diesel and Automotive Tech labs have stairs at their entrances from the corridor, which are not in compliance with ADA requirements.

Install ramps at stairs in labs to provide uniform accessibility to disabled individuals.

Priority Level (1-4): 3

Estimated Cost:

\$93,000 - \$118,000

4. Door hardware throughout building is not code compliant, with standard pulls and locking hardware.

Replace non-compliant door hardware on interior doors with new lever-type locksets and panic devices at exit egress doors. Install classroom security locksets for added safety for intrusion prevention.

Priority Level (1-4): 3

Estimated Cost:

\$76,000 - \$101,000

1. CODE REQUIRED / SAFETY IMPROVEMENTS (continued):

General Construction (continued):

5. Stair railings are required to have a handrail at 34" H., and balusters are not to exceed 4" apart in width.

Modify and/or replace existing stair handrails with code-compliant painted steel handrails.

Priority Level (1-4): 3 Estimated Cost: \$20,000 - \$30,000

6. The majority of interior building signage throughout the building was recently replaced in 2013. Other signage that remains is not per ADA guidelines which require an 8" sign and include tactile braille to accommodate visually impaired occupants.

Replace interior building signage with code-compliant signs.

Priority Level (1-4): 3 Estimated Cost: \$9,000 - \$12,000

7. The existing elevator's controls are not ADA compliant, and a firemen's recall feature is not present, which returns the cab to the main level in an emergency.

Update the elevator to meet current code standards.

Priority Level (1-4): 2 Estimated Cost: \$45,000 - \$60,000

Estimated General Construction Subtotal: \$1,319,000 - \$1,472,000

Plumbing:

1. Replace all existing plumbing fixtures and associated trim with new low flow plumbing fixtures and plumbing fixtures that meet ADA requirements.

Priority Level (1-4): 1 Estimated Cost: \$450,000 - \$507,000

2. Current plumbing code requires that all faucets for handwashing must be provided with thermostatic mixing valves set at no more than 109 degrees.

Priority Level (1-4): 2 Estimated Cost: \$90,000 - \$119,000

Estimated Plumbing Subtotal: \$540,000 - \$626,000

Electrical:

1. Fire alarm system needs to be upgraded to meet current ADA requirements.

Provide a new code approved fire alarm system.

Priority Level (1-4): 1 Estimated Cost: \$225,000 - \$282,000

2. Federal ADA and state building codes require Areas of Rescue in two story buildings located within stairs or in fire protected areas for disabled individuals to wait until fire personnel arrive and assist them to safety.

Locate an Area of Rescue within or near 2nd floor stairs and install a remote call station system for communication to fire alarm panel.

Priority Level (1-4): 1 Estimated Cost: \$51,000 - \$79,000

Estimated Electrical Subtotal: \$276,000 - \$361,000

1. CODE REQUIRED / SAFETY IMPROVEMENTS TOTAL: \$2,135,000 - \$2,459,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS:

General Construction:

1. Side parking lots and upper drive are showing signs of full depth cracks and open pot holes. Storm structures are sinking and collapsing due to subsurface erosion.

Remove all existing asphalt drives and parking lots down to stone sub-base. Re-compact / add additional stone base as needed and install new asphalt binder and wearing courses. Rebuild / replace collapsed storm inlets, tops and associated pipe.

Priority Level (1-4): 1 Estimated Cost: \$360,000 - \$410,000

2. Sidewalks, stairs, and curbs are cracked and shifting due to settlement causing a tripping hazard.

Replace select sidewalks, stairs, and curbs as needed to prevent further deterioration.

Priority Level (1-4): 2 Estimated Cost: \$106,000 - \$156,000

3. Roof replacement was performed in 2007 which is still has 5 years remaining under its 20 year warranty and is in fair condition. Roof curbs are cracking and beginning to leak at several locations. The roof is currently a built-up modified bitumen 2-ply system manufactured by Johns Manville.

Re-evaluate roof replacement at time of a building-wide renovation and replace with a new adhered rubber or modified bitumen roof system including new metal edging and any associated flashing.

Priority Level (1-4): 3 Estimated Cost: \$1,200,000 - \$1,400,000

4. The existing exterior metal panels were re-caulked in 2012 but are original to the building, rusting, and in need of replacement.

Replace the metal panels with new or a synthetic stucco type material.

Priority Level (1-4): 3 Estimated Cost: \$492,000 - \$542,000

5. The existing exterior brick masonry walls (inc. the loading dock) are showing signs of brick and mortar deterioration due to weather and exposure.

Repair / repoint any brick and mortar joints; clean and seal all masonry surfaces to extend life of exterior walls.

Priority Level (1-4): 3 Estimated Cost: \$270,000 - \$320,000

6. The wall in the Diesel lab leaks water thru the exterior wall adjacent to the sloping hillside. Wall anchor straps to support wall cracking at this area were installed in June 2018.

Excavate soil adjacent to exterior wall and install new waterproofing membrane and drainage board and pipe to convey water away from wall. Backfill excavation with granular stone to promote water infiltration to new drainage system.

Priority Level (1-4): 1 Estimated Cost: \$17,000 - \$27,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):**General Construction (continued):**

7. Wall paint throughout the building should be re-painted if a major renovation project occurs.

Repaint all interior / exterior surfaces in building.

Priority Level (1-4): 4 Estimated Cost: \$225,000 - \$305,000

8. Many areas have had new ceiling tile installed but others are sagging due to humidity and are stained in several locations from roof and/or above ceiling equipment leaks. If a major renovation were to occur, above ceiling access would require replacement of ceilings.

Replace lay-in ceilings with new humidity resistant ceiling panels

Priority Level (1-4): 4 Estimated Cost: \$466,000 - \$516,000

9. Flooring throughout the building is generally in fair condition, and many of the spaces have had replacement occur during recent small renovation projects. Some floors are original and are worn due to age.

Replace VCT and/or carpet flooring in all instructional classroom and office spaces.

Priority Level (1-4): 4 Estimated Cost: \$225,000 - \$275,000

Estimated General Construction Subtotal: \$3,391,000 - \$3,951,000

HVAC:

1. Existing hot water pumps are constant volume, leaking, and nearing 40 years old.

Replace hot water pumps and incorporate variable speed drives for energy savings.

Priority Level (1-4): 1 Estimated Cost: \$93,000 - \$121,000

2. The building's existing temperature control system and terminal control components are nearing 40 years old, is mostly pneumatic, and offers limited energy saving/building management capability.

- Upgrade building ATC system to full DDC.

Priority Level (1-4): 1 Estimated Cost: \$932,000 - \$988,000

- Replace all existing pneumatic valves and damper actuators with electric type to compliment the ATC system conversion to DDC.

Priority Level (1-4): 1 Estimated Cost: \$169,000 - \$225,000

- To better manage energy consumption, incorporate demand control ventilation sequences to limit the amount of outside air brought into the building to match occupant load. Install CO2 sensors to manage air quality and energy control.

Priority Level (1-4): 1 Estimated Cost: \$41,000 - \$69,000

- Existing 3-way temperature control valves are nearing 40 years old and do not allow for variable speed pumping. Install new two-way temperature control valves on all terminal heating equipment to allow full throttling capability to the variable speed hot and chilled water pumps.

Priority Level (1-4): 1 Estimated Cost: \$212,000 - \$268,000

Estimated HVAC Temperature Controls Subtotal: \$1,354,000 - \$1,550,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

HVAC (continued):

3. Existing air handling units are in very poor condition. They are beyond their serviceable life and require frequent maintenance and repairs.

Replace air handling units. Units will need fabricated to be assembled within penthouse to accommodate space limitations. New units to include filtration, UV lighting and bipolar ionization to provide better air quality and virus prevention.

Priority Level (1-4): 1 Estimated Cost: \$1,960,000 - \$2,070,000

4. Ductwork throughout the building is original and may need cleaning and insulation repair at damaged locations where work and/or leaks previously occurred.

Repair and clean ductwork. Further detailed evaluation can confirm extent of scope of repairs needed.

Priority Level (1-4): 1 Estimated Cost: \$282,000 - \$338,000

5. Exhaust fans are in poor condition and do not provide adequate ventilation to spaces.

Replace exhaust fans.

Priority Level (1-4): 1 Estimated Cost: \$135,000 - \$192,000

6. Existing variable air volume (VAV) boxes are in poor condition and require routine maintenance.

Replace VAV boxes.

Priority Level (1-4): 1 Estimated Cost: \$422,000 - \$479,000

7. Simple (non-moving) terminal equipment has the potential to be reused if its condition is acceptable.

Replace terminal equipment such as convectors and finned-tube radiation if necessary.

Priority Level (1-4): 2 Estimated Cost: \$68,000 - \$96,000

8. X-ray testing has confirmed the existing hot and chilled water distribution piping to be in poor condition and is not appropriate for long term reuse.

Replace existing hot and chilled water piping systems from central plant to and thru building.

Priority Level (1-4): 1 Estimated Cost: \$1,379,000 - \$1,491,000

Estimated HVAC Subtotal: \$5,693,000 - \$6,337,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):**Plumbing:**

1. Replace all existing plumbing gate valves, isolation valves, balancing stations, and any additional in-line plumbing equipment.
Priority Level (1-4): 1 Estimated Cost: \$113,000 - \$169,000
2. Install grease interceptors for food service/preparation areas to avoid frequent clogs and backups in sanitary lines.
Priority Level (1-4): 1 Estimated Cost: \$135,000 - \$192,000
3. Replace original steam water heaters. Consider water-to-water hot water generators if central steam is converted to hot water only. Other considerations include gas fired domestic water heaters if the gas service is extended from the Power House to Steel Center.
Priority Level (1-4): 1 Estimated Cost: \$85,000 - \$113,000
4. Extend gas service from Power House to Steel Center to serve new hot water heaters, the Collision Repair Lab, and the Kitchen areas.
Priority Level (1-4): 1 Estimated Cost: \$45,000 - \$74,000
5. Video inspection of the underground sanitary drainage systems should be performed prior to the development of any renovation project. Power rodding and pressure flushing of interior underground sanitary drain lines should also be included in short and/or long-term planning.
Priority Level (1-4): 1 Estimated Cost: \$128,000 - \$184,000
6. A central thermostatic mixing valve with thermometer indicator should be provided at the hot outlet of each water heater. Presently there are none installed to prohibit an excessive high temperature event. Water heater system to be set above 140 degrees Fahrenheit to help prevent Legionella.
Priority Level (1-4): 1 Estimated Cost: \$23,000 - \$51,000
7. X-ray testing has confirmed the existing domestic hot and cold water distribution piping to be in good condition for long term reuse.
Priority Level (1-4): 0 Estimated Cost: \$0
- Estimated Plumbing Subtotal: \$529,000 - \$783,000**

Electrical:

1. The lighting in some of the offices, corridors, and support spaces were replaced with T8 fluorescent and the fixtures are in good condition. Most of the lamps in the fixtures were retrofitted recently with LED lamps, but the original fixtures remain. Some of the existing exit signs are older but are lighting up adequately.

Replace the light fixtures, exit signs and controls in the building with LED fixtures and for energy and maintenance savings.

Priority Level (1-4): 4 Estimated Cost: \$754,000 - \$810,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):**Electrical (continued):**

2. Some of the exterior soffit, pole lights, and wall mounted lighting were replaced with LED for energy savings and maintenance reductions.

Replace the remaining exterior pole lighting heads and remaining building mounted lighting with LED for energy savings and maintenance reductions.

Priority Level (1-4): 3 Estimated Cost: \$29,000 - \$57,000

3. The existing emergency generator is a Koehler 100 KW diesel fired unit with an ASCO transfer switch and an area protection panel. It is original to the building and should be replaced due to age and condition.

Replace existing generator with a 150kw diesel fired unit with subbase tank and two automatic transfer switches, install GTD's for switched emergency lighting.

Priority Level (1-4): 1 Estimated Cost: \$158,000 - \$214,000

4. The phone-based PA system consists of speakers and call buttons in the lab spaces/classrooms and speakers in the corridors. Several rooms do not have speakers. The system should be replaced due to age.

Replace the existing PA system.

Priority Level (1-4): 2 Estimated Cost: \$151,000 - \$207,000

5. Existing original Federal Pacific switchgear, panelboards, bus duct, and feeders are original to the building.

Replace existing FPE distribution equipment including feeders.

Priority Level (1-4): 1 Estimated Cost: \$679,000 - \$735,000

6. Original building branch circuits and devices are original to the building.

Replace original branch circuits and devices.

Priority Level (1-4): 2 Estimated Cost: \$453,000 - \$509,000

7. Determine the needs, existing conditions, and upgrades to the telecommunications / data cabling.

Upgrade existing telecommunications cabling to Cat 6 or better.

Priority Level (1-4): 3 Estimated Cost: \$151,000 - \$207,000

8. Perform electrical work related to mechanical system recommendations identified above.

Provide electrical work for mechanical recommendations.

Priority Level (1-4): 1 Estimated Cost: \$282,000 - \$338,000

Estimated Electrical Subtotal: \$2,657,000 - \$3,077,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS TOTAL:

\$12,270,000 - \$14,148,000

3. EDUCATIONAL PROGRAM IMPROVEMENTS:

Public Safety Program:

1. Create additional locker room space. Estimated Cost: \$100,000 - \$ 125,000
Estimated Public Safety Program Subtotal: \$100,000 - \$125,000

SCCTE comment: Public Safety Program has a growing enrollment which requires additional changing space for students.

Electrical Construction Program:

1. Replace wash fountain with new stainless-steel sink. Estimated Cost: \$ 5,000 - \$ 8,000
2. Create an educational underground burial area at rear of lab. Estimated Cost: \$ 10,000 - \$ 15,000
Estimated Electrical Construction Program Subtotal: \$15,000 - \$23,000

SCCTE comment: Electrical Construction Program requires instruction in burial of underground utility lines to simulate work site conditions.

Carpentry Program:

1. Reduce the size of the locker room to increase the size of the classroom. Estimated Cost: \$ 90,000 - \$ 115,000
Estimated Carpentry Program Subtotal: \$90,000 - \$115,000

SCCTE comment: Carpentry Program classroom is undersized; the program has maintained high enrollment which is expected to continue.

Welding Program:

1. Provide a drop down hose and hood in all 24 booths. Estimated Cost: \$150,000 - \$ 175,000
2. Install new slatted-type welding curtains. Estimated Cost: \$ 10,000 - \$ 15,000
3. Create an outdoor welding booth area. Estimated Cost: \$ 5,000 - \$ 10,000
Estimated Welding Program Subtotal: \$165,000 - \$200,000

SCCTE comment: Welding Program hose and curtain updates will improve safety for students, an outdoor booth will add realistic simulation of work site conditions.

Collision Repair and Refinishing Program:

1. Increase electrical power to this program. Estimated Cost: \$ 75,000 - \$ 100,000
Estimated Collision Repair and Refinishing Program Subtotal: \$75,000 - \$100,000

Diesel Technology Program:

1. Create a new addition to provide additional lab space, including 2 heavy lift and 2 medium lift hoists. Estimated Cost: \$1,200,000 - \$1,300,000
2. Modify existing lab space to connect to annex. Estimated Cost: \$ 475,000 - \$ 525,000
3. Increase electrical power to this program. Estimated Cost: \$ 75,000 - \$ 100,000
Estimated Diesel Technology Program Subtotal: \$1,750,000 - \$1,925,000

3. EDUCATIONAL PROGRAM IMPROVEMENTS (continued):

Automotive Technology Program:

1. Create a larger storage room adjacent to Diesel Tech.
Estimated Cost: \$ 75,000 - \$ 100,000
2. Repurpose the adjoining School Building Maintenance space to create additional classroom space.
Estimated Cost: \$ 90,000 - \$ 115,000
3. Increase electrical power.
Estimated Cost: \$125,000 - \$ 175,000
4. Replace upper garage door panels with opaque material to allow for natural lighting.
Estimated Cost: \$ 12,000 - \$ 15,000

Estimated Automotive Technology Program Subtotal: \$302,000 - \$405,000

SCCTE comment: Automotive Technology Program classroom is undersized; the program has maintained high enrollment which is expected to continue. Other updates will support future growth of the program including adding new technology.

Building Trades and Maintenance Program:

1. Replace clogged floor drains.
Estimated Cost: \$ 45,000 - \$ 60,000
2. Install new window between classroom and work room.
Estimated Cost: \$ 5,000 - \$ 10,000
3. Install new dust collection and air filtration system.
Estimated Cost: \$150,000 - \$ 175,000

Estimated Building Trades and Maintenance Program Subtotal: \$200,000 - \$245,000

SCCTE comment: Building Trades and Maintenance Program lab activities create significant dust; floor drain blocked during previous use of the area (former masonry lab).

HVAC/Refrigeration Program:

1. Create new workstations in shop area/expand Lab into new addition.
Estimated Cost: \$450,000 - \$ 550,000
 2. Create additional storage and office in existing Lab.
Estimated Cost: \$125,000 - \$ 175,000
 3. Increase electrical power to this program.
Estimated Cost: \$ 75,000 - \$ 100,000
- Estimated HVAC/Refrigeration Program Subtotal: \$650,000 - \$825,000**

SCCTE comment: HVAC/Refrigeration Program lab is undersized; the program has maintained high enrollment which is expected to continue.

Veterinary Assistant Program:

No program improvements have been requested.

SCCTE comment: Veterinary Assistant Program is new; instructor believes the area is adequate for effectively delivering this program of study.

3. EDUCATIONAL PROGRAM IMPROVEMENTS (continued):

Computer Technology Program:

- | | |
|--|---|
| 1. Increase electrical power to this program. | Estimated Cost: \$ 75,000 - \$ 100,000 |
| Estimated Computer Technology Program Subtotal: | \$75,000 - \$100,000 |

SCCTE comment: Computer Technology Program and/or other nearby areas need increased electric capacity.

Health Assistant Program:

- | | |
|--|---|
| 1. Install new windows between classroom and lab space. | Estimated Cost: \$ 8,000 - \$ 12,000 |
| 2. Update countertops and cabinets in lab space. | Estimated Cost: \$ 25,000 - \$ 35,000 |
| 3. Relocated to facilitate Exercise Program location in lobby. | Estimated Cost: \$125,000 - \$ 150,000 |

Estimated Health Assistant Program Subtotal: \$158,000 - \$197,000

SCCTE comment: Health Assistant program relocation will support needs of program while creating a high level of engaging of visitors to the school for NEW Exercise Science program.

Exercise Science and Rehabilitation Program:

- | | |
|---|--|
| 1. Relocate to Lobby Commons to increase visibility and public use. | Estimated Cost: \$ 150,000 - \$ 200,000 |
| Estimated Health Assistant Program Subtotal: | \$150,000 - \$200,000 |

SCCTE comment: Exercise Science program location will provide higher visibility and open future possibilities to serve the public; main lobby to become "mall-type" space.

Bakery / Culinary Arts Programs:

- | | |
|--|---|
| 1. Create a new pastry counter and service center and expand the dining space with outside café area on lobby commons for public access. | Estimated Cost: \$190,000 - \$ 240,000 |
| 2. Create new, larger classrooms and relocate locker rooms. | Estimated Cost: \$250,000 - \$ 300,000 |
| 3. Replace all coolers and freezers. | Estimated Cost: \$175,000 - \$ 225,000 |
| 4. Renovate current labs (select equipment replacement, finishes, etc.) | Estimated Cost: \$350,000 - \$ 400,000 |
| Estimated Bakery/Culinary Arts Programs Subtotal: | \$965,000 - \$1,165,000 |

SCCTE comment: Bakery / Culinary Arts Programs need improved space to add public engagement, changes will provide higher visibility and open future vision to serve the public; main lobby to become "mall-type" space.

Advertising and Design Program:

- | | |
|--|--|
| 1. Convert part of Computer Lab A into a new Photography/Video/Sound Studio. | Estimated Cost: \$ 50,000 - \$ 75,000 |
| Estimated Advertising and Design Program Subtotal: | \$ 50,000 - \$ 75,000 |

SCCTE comment: Advertising and Design Program enhancement will provide committed space to capture high quality photographs, video, and sound content.

3. EDUCATIONAL PROGRAM IMPROVEMENTS (continued):

Cosmetology Program:

- | | |
|---|--|
| 1. Create a new retail area for the Spa/Hair Salon in former adjacent School office suite. | Estimated Cost: \$ 225,000 - \$ 275,000 |
| 2. Create new, larger locker rooms. | Estimated Cost: \$ 100,000 - \$ 125,000 |
| 3. Provide new interior windows between spaces and exterior windows for additional natural light. | Estimated Cost: \$ 70,000 - \$ 95,000 |
| 4. Increase electrical power to this program. | Estimated Cost: \$ 75,000 - \$ 100,000 |
| Estimated Cosmetology Program Subtotal: | \$470,000 - \$595,000 |

SCCTE comment: Cosmetology Program need improved space to add public engagement, changes will provide higher visibility and open future vision to serve the public; main lobby to become "mall-type" space.

Medical Professions Program:

- | | |
|--|---|
| 1. Relocate Program to former Conference Room B and create a larger classroom and lab area. | Estimated Cost: \$115,000 - \$ 140,000 |
| • Create small Phlebotomy/Pharmaceutical Tech instruction lab spaces with cabinets, sink and countertop. | Estimated Cost: \$ 65,000 - \$ 90,000 |
| • Create new locker rooms. | Estimated Cost: \$100,000 - \$ 125,000 |
| Estimated Medical Professions Program Subtotal: | \$ 280,000 - \$355,000 |

SCCTE comment: Medical Professions Program relocation and enhancements will ensure a high degree of alignment of the space to the employment settings of its graduates.

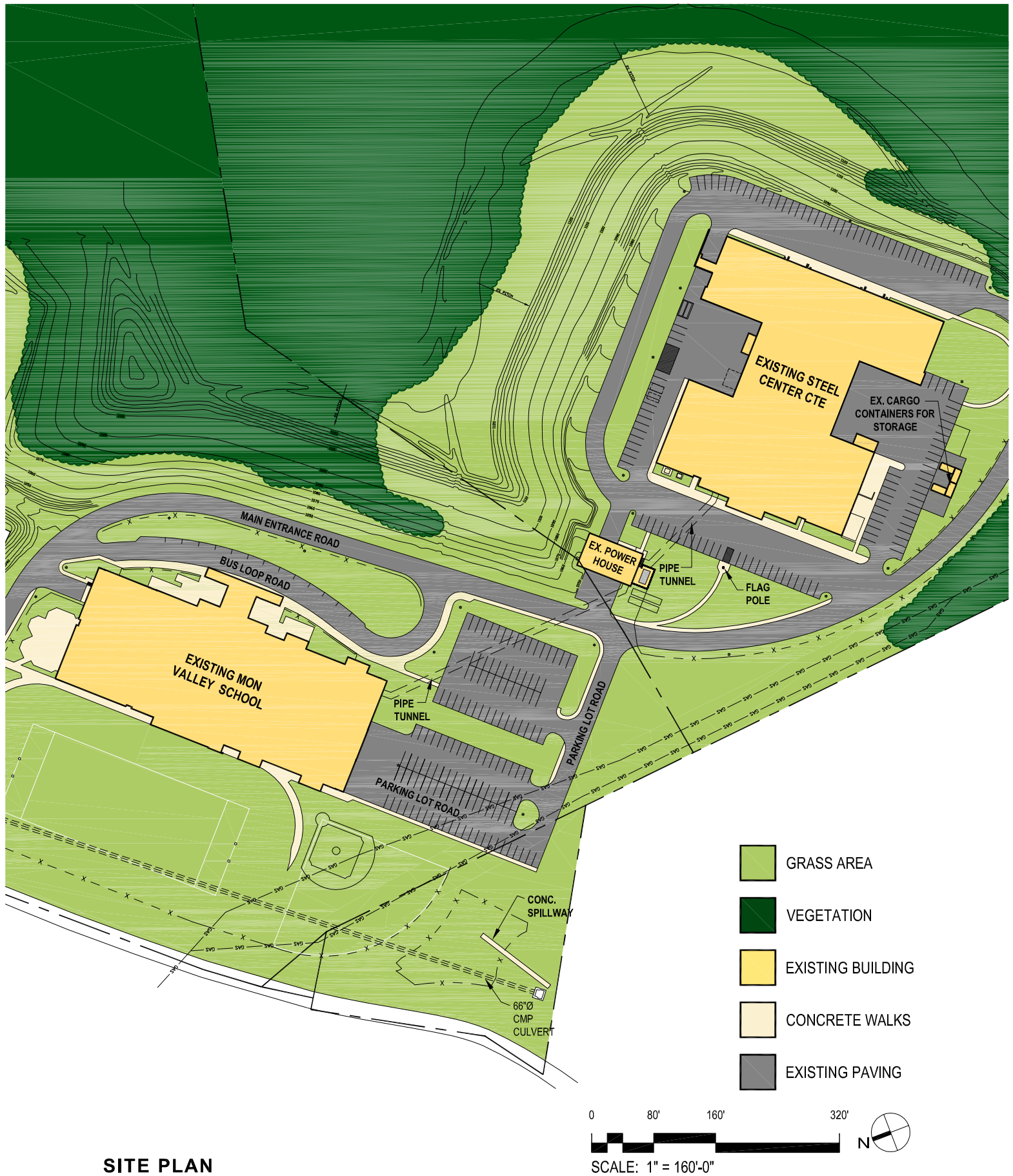
Miscellaneous Building Functions:

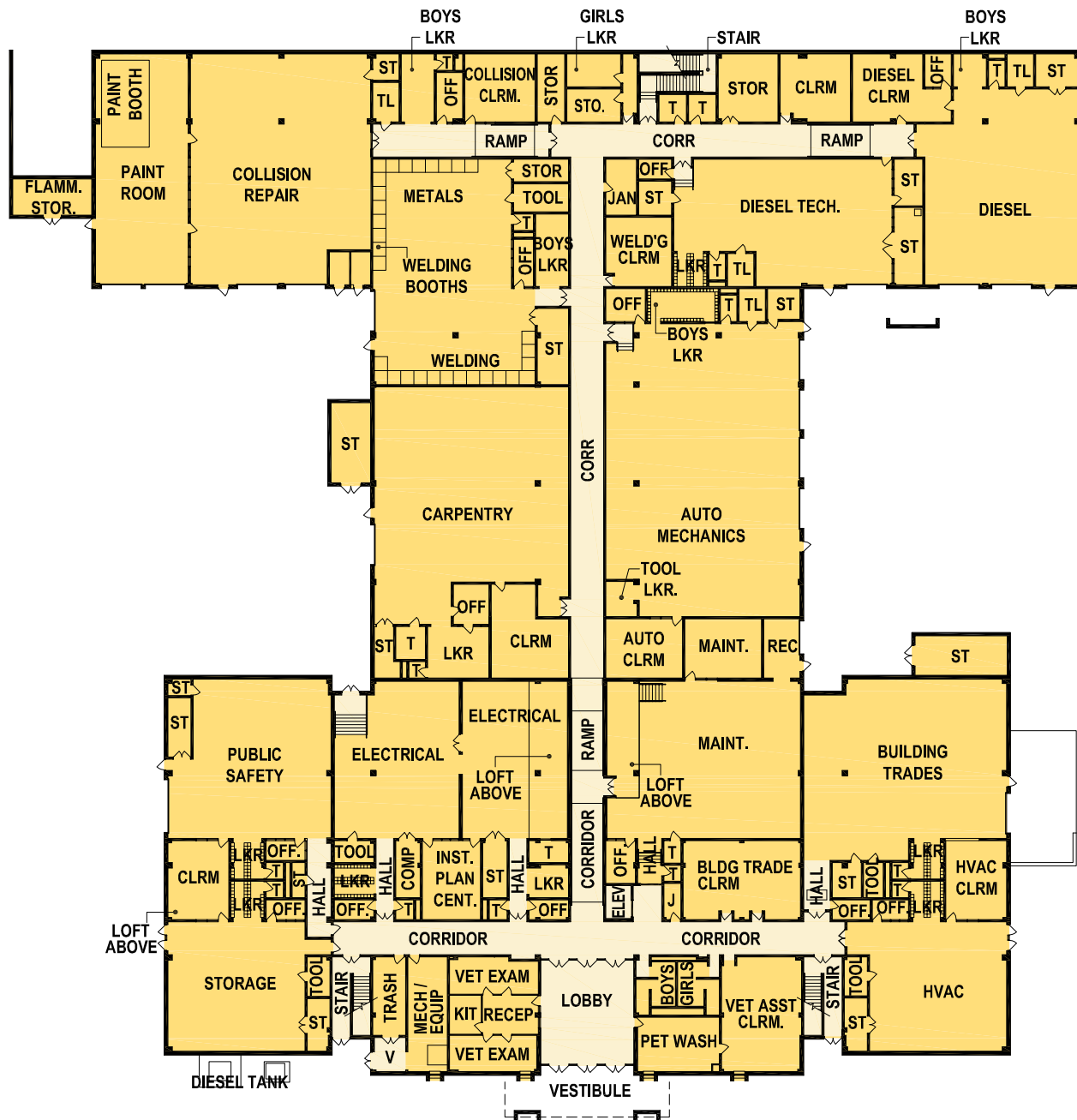
- | | |
|--|----------------------------------|
| 1. Reorganize School Offices to improve function | \$185,000 - \$210,000 |
| 2. Relocate Conference Room B to Lobby Commons | \$160,000 - \$185,000 |
| 3. Relocate School Store to Lobby Commons | \$ 60,000 - \$ 85,000 |
| 4. Relocate Student Services/Guidance Department | \$185,000 - \$210,000 |
| 5. Relocate Health and Safety Nurse | \$120,000 - \$145,000 |
| 6. Relocate Faculty Room on 2 nd Floor | \$100,000 - \$125,000 |
| 7. Relocate Learning Facilitator Office | \$ 75,000 - \$ 90,000 |
| 8. Create new shared 2 nd floor Boys and Girls Locker Rooms | \$150,000 - \$175,000 |
| 9. Provide new overhead door and asphalt at new Storage/Receiving area | \$ 35,000 - \$ 60,000 |
| Estimated Miscellaneous Building Functions Subtotal: | \$1,070,000 - \$1,285,000 |

SCCTE comment: This list of updates and general modifications to the building will ensure effective and efficient operations of the administrative and support functions needed for maximized program delivery for students.

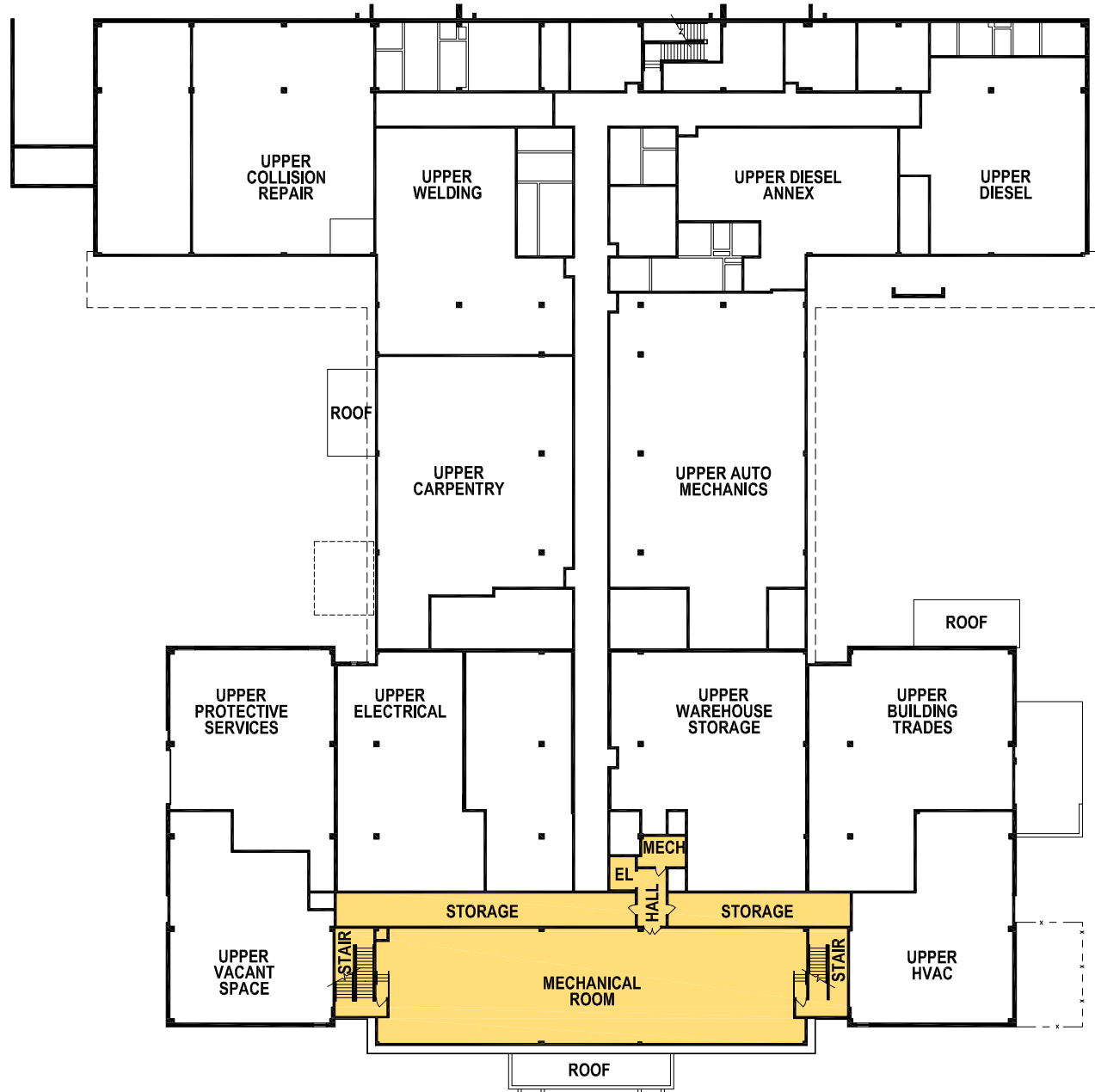
3. EDUCATIONAL PROGRAM IMPROVEMENTS TOTAL: **\$6,565,000 - \$7,935,000**

ESTIMATED STEEL CENTER CTE TOTAL: **\$20,970,000 - \$24,542,000**



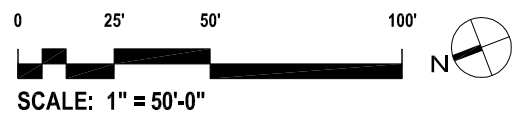


FIRST FLOOR PLAN

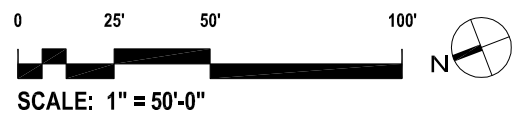
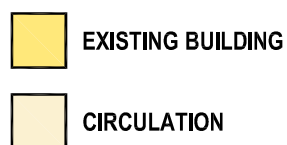


 EXISTING BUILDING

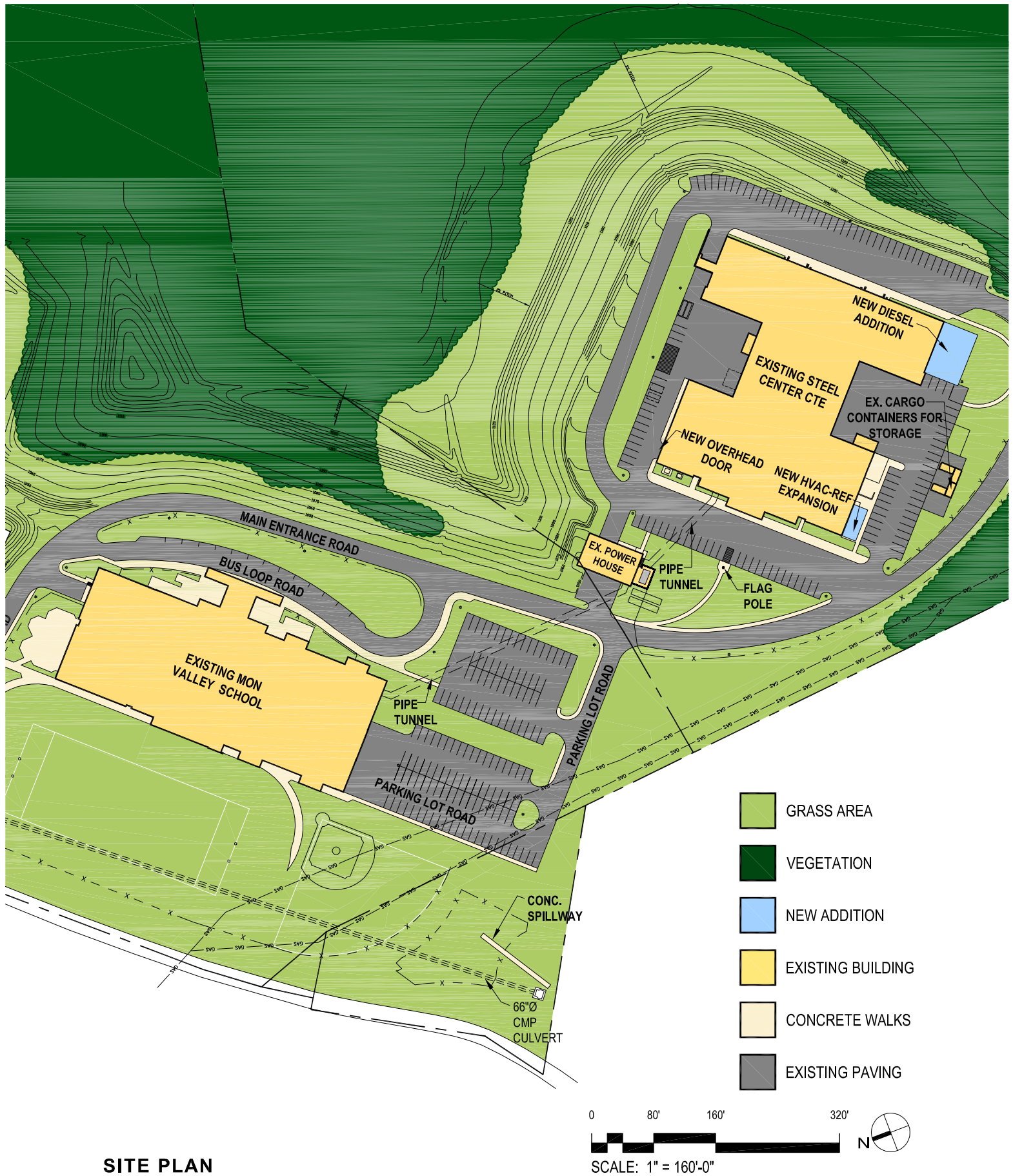
 CIRCULATION



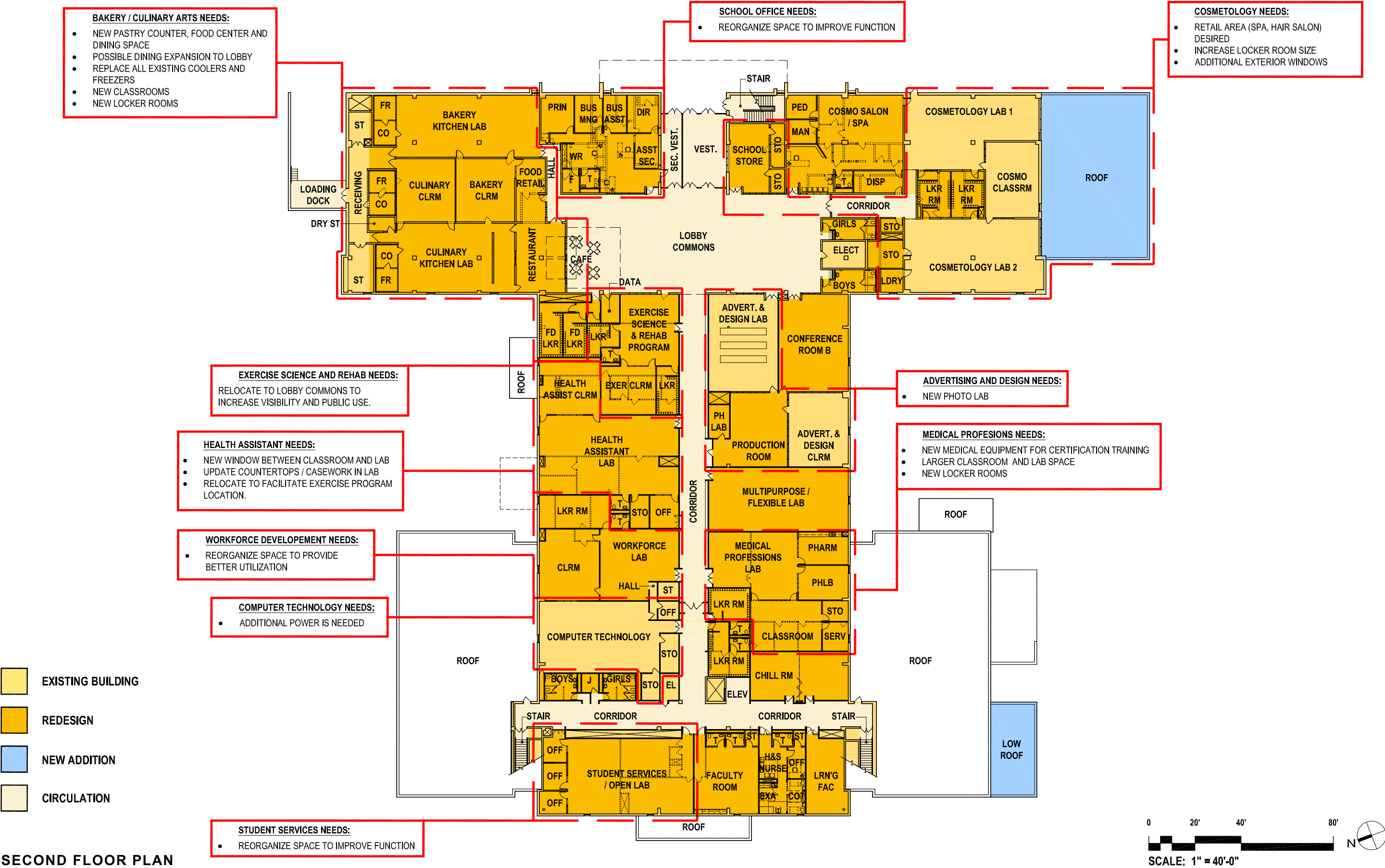
MEZZANINE FLOOR PLAN



SECOND FLOOR PLAN







POWER HOUSE

565 North Lewis Run Road, Jefferson Hills, PA, 15025

CONSTRUCTION**HISTORY:**

1977 originally constructed
 2010 Cooling tower replacement
 2012 Miscellaneous Energy
 Improvements (chiller replacement,
 low- flow plumbing fixtures, lighting)
 2016 Boiler replacement
 2016 Roof Replacement

SIZE:

4,260 square feet on 55.5 total acres.

**1. CODE REQUIRED / SAFETY IMPROVEMENTS:**

No code required / safety improvement issues have been reported at this facility.

2. BUILDING INFRASTRUCTURE IMPROVEMENTS:**General Construction:**

1. The existing exterior metal panels are original to the building, rusting, and in need of replacement.

Replace the metal panels with new or a synthetic stucco type material.

Priority Level (1-4): 3**Estimated Cost: \$100,000 - \$150,000**

2. The existing exterior brick masonry walls on the building and the cooling tower enclosure are beginning to show signs of brick and mortar deterioration.

Repair / repoint any brick and mortar joints; clean and seal all masonry surfaces to extend life of exterior walls.

Priority Level (1-4): 3**Estimated Cost: \$ 50,000 - \$ 75,000**

3. Several exterior doors have been recently replaced. The remaining lower man double door should be replaced due to age and condition.

Replace the remaining lower man door.

Priority Level (1-4): 3**Estimated Cost: \$ 5,000 - \$ 8,000**

4. The original exterior handrails are rusting and need to be cleaned and repainted.

Clean and paint exterior handrails.

Priority Level (1-4): 3**Estimated Cost: \$ 1,000 - \$ 2,000****Estimated General Construction Subtotal:****\$156,000 - \$235,000**

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):**HVAC:**

1. A hot water boiler plant would be more efficient and less labor intensive to operate.

Convert the steam boilers to hot water.

Priority Level (1-4): 1

Estimated Cost: \$ 90,000 - \$119,000

2. Existing heating only AHU in the chiller room is original to the building and in need of replacement due to frequent maintenance and parts availability.

Replace the AHU in the chiller room.

Priority Level (1-4): 1

Estimated Cost: \$ 32,000 - \$60,000

3. The remaining back-up chiller (1 of 2 not replaced in 2012) is original to the building and is beyond its useful life and efficiency.

Replace existing back-up chiller.

Priority Level (1-4): 1

Estimated Cost: \$422,000 - \$479,000

4. A variable primary chilled water pumping arrangement is simpler to control and uses less energy. Existing pumps were replaced in 2012, but variable speed drives should be added to better manage energy consumption.

Replace chilled water pumps and convert to a variable primary chiller pumping arrangement for energy savings.

Priority Level (1-4): 1

Estimated Cost: \$ 96,000 - \$124,000

5. A conversion to steam will require new hot water distribution to both buildings.

Install new hot water pumps and drives as part of the conversion from steam to hot water.

Priority Level (1-4): 1

Estimated Cost: \$169,000 - \$225,000

6. If only a Steel Center project is considered, the steam piping from the Power House to Steel Center shall be replaced since it was found to be in poor condition. The recently installed boilers can remain steam to continue to serve Mon Valley and a dedicated steam to water convertor will be installed for Steel Center.

Priority Level (1-4): 1

Estimated Cost: \$164,000 - \$220,000
(Not included in total below)

OR

If both buildings are planned for a simultaneous upgrade, new hot water piping will be extended from the central plant to both buildings.

Priority Level (1-4): 1

Estimated Cost: \$254,000 - \$310,000

Estimated HVAC Subtotal: \$1,063,000 - \$1,317,000
(assuming both buildings convert to hot water)

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):**Electrical:**

1. The lighting in the building was replaced in 2012 but is a mix of fluorescent and HID.

Replace the lighting in the building with LED fixtures for energy and maintenance savings.

Priority Level (1-4): 3 **Estimated Cost: \$ 77,000 - \$105,000**

2. The exterior wall mounted lighting are original and in need of replacement.

Replace the exterior wall mounted lighting with LED for energy savings and maintenance reductions.

Priority Level (1-4): 2 **Estimated Cost: \$ 14,000 - \$ 20,000**

3. The existing emergency generator is oil fueled and was installed after the original construction when boilers were converted to natural gas.

Install a new 40 KW diesel fired generator with subbase tank, automatic transfer switch and 225 amp distribution panel. Feed one boiler, one hot water pump and the ATC system on the emergency power system to prevent pipe freeze ups during extended power outages.

Priority Level (1-4): 1 **Estimated Cost: \$ 57,000 - \$ 85,000**

4. Some of the existing exit signs are older and not lighting up adequately.

Replace the exit signs with LED.

Priority Level (1-4): 1 **Estimated Cost: \$ 6,000 - \$ 12,000**

5. Existing original switchgear, panelboards, bus duct, and feeders are original to the building that should be replaced due to age and condition.

Replace existing distribution equipment including feeders.

Priority Level (1-4): 1 **Estimated Cost: \$ 45,000 - \$ 74,000**

6. Perform electrical work related to mechanical system recommendations identified above.

Provide electrical work for mechanical recommendations.

Priority Level (1-4): 1 **Estimated Cost: \$ 40,000 - \$ 68,000**

Estimated Electrical Subtotal: \$239,000 - \$364,000

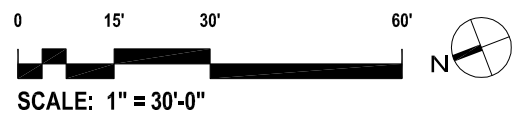
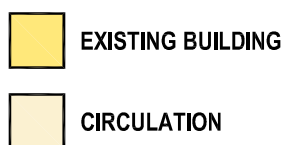
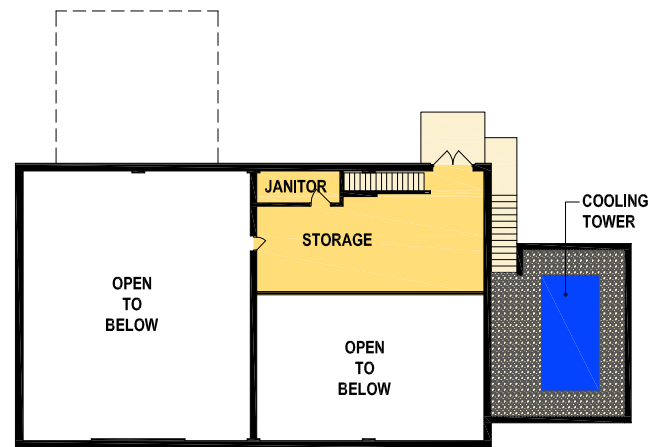
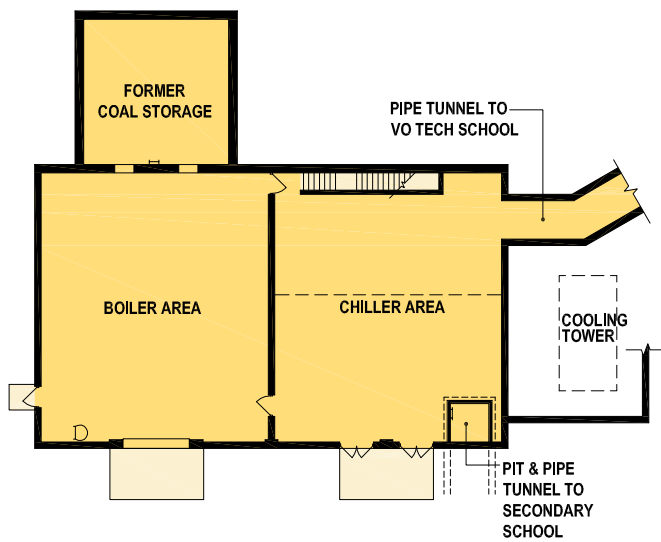
2. BUILDING INFRASTRUCTURE IMPROVEMENTS TOTAL:

\$1,458,000 - \$1,916,000

3. EDUCATIONAL PROGRAM IMPROVEMENTS:

No educational program is conducted at this facility.

ESTIMATED POWER HOUSE TOTAL: \$1,458,000 - \$1,916,000



FLOOR PLANS

MON VALLEY SCHOOL

555 North Lewis Run Road, Jefferson Hills, PA, 15025

CONSTRUCTION**HISTORY:**

1977 Originally constructed
2007 Partial Roof Replacement
(partial warranty)
2009 Kitchen dishwasher exhaust
duct replacement
2010 Locker Room shower repairs
Automotive Lab car lift
Replacement
Kitchen freezer/cooler replacement
2011 Window replacement
2012 Miscellaneous Energy
Improvements (low- flow plumbing
fixtures, exterior caulking)
Select sidewalk replacement
2014 Pool AHU replacement
2015 Corridor security doors installation
2018 Emergency generator / transfer switch replacement
Pool lighting and ceiling replacement
2019 Campus entrance drive pavement / storm inlet replacement

**SIZE:**

132,890 square feet on 55.5 total acres

1. CODE REQUIRED / SAFETY IMPROVEMENTS:**General Construction:**

1. Locker room, gang, and single-user faculty restrooms throughout building do not meet today's accessibility requirements. Floor clearances and turning areas are not sufficient to accommodate a disabled individual within the spaces. Plumbing fixtures and toilet accessories heights and locations are also not compliant.

Renovate all building restrooms to provide adequate clearances for handicap; replace plumbing fixtures and accessories.

Priority Level (1-4): 3**Estimated Cost: \$860,000 - \$910,000**

2. Classroom and office entrance doors are not compliant with ADA guidelines indicating required clearances from adjacent wall proximities.

Modify classroom and office door entrances to meet ADA requirements.

Priority Level (1-4): 3**Estimated Cost: \$160,000 - \$185,000**

3. Door hardware throughout building is not code compliant, with standard pulls and locking hardware.

Replace non-compliant door hardware on interior doors with new lever-type locksets and panic devices at exit egress doors. Install classroom security locksets for added safety for intrusion prevention.

Priority Level (1-4): 3**Estimated Cost: \$ 70,000 - \$ 95,000**

1. CODE REQUIRED / SAFETY IMPROVEMENTS (continued):

General Construction (continued):

4. All building stair railings and guards are too low to comply with today's 42" height code requirement. Railings are also required to have a handrail at 34" H., and balusters are not to exceed 4" apart in width.

Modify and/or replace existing stair handrails and guards with code-compliant painted steel handrails.

Priority Level (1-4): 3 **Estimated Cost: \$ 70,000 - \$ 95,000**

5. Interior building signage throughout the building is not tactile braille to accommodate visually impaired occupants as required per ADA guidelines.

Replace interior building signage with code-compliant signs.

Priority Level (1-4): 3 **Estimated Cost: \$ 20,000 - \$ 30,000**

6. The existing elevator's controls are not ADA compliant, and a firemen's recall feature is not present, which returns the cab to the main level in an emergency.

Update the elevator to meet current code standards.

Priority Level (1-4): 2 **Estimated Cost: \$ 45,000- \$ 60,000**

Estimated General Construction Subtotal: \$1,225,000 - \$1,375,000

Plumbing:

1. Current plumbing code requires that all faucets for handwashing must be provided with thermostatic mixing valves set at no more than 109 degrees

Priority Level (1-4): 1 **Estimated Cost: \$90,000 - \$119,000**

2. Current plumbing code requires a maximum operating water pressure of 80 psi. Reset the existing pressure reducing valves at the water service entrance.

Priority Level (1-4): 2 **Estimated Cost: \$ 7,000 - \$ 17,000**

Estimated Plumbing Subtotal: \$97,000- \$136,000

Electrical:

1. Fire alarm system needs to be upgraded to meet current ADA requirements.

Provide a new code approved fire alarm system.

Priority Level (1-4): 1 **Estimated Cost: \$212,000 - \$268,000**

2. Federal ADA and state building codes require Areas of Rescue in two story buildings located within stairs or in fire protected areas for disabled individuals to wait until fire personnel arrive and assist them to safety.

Locate an Area of Rescue within or near 2nd floor stairs and install a remote call station system for communication to fire alarm panel.

Priority Level (1-4): 1 **Estimated Cost: \$ 51,000 - \$ 79,000**

Estimated Electrical Subtotal: \$263,000 - \$347,000

1. CODE REQUIRED / SAFETY IMPROVEMENTS TOTAL: \$1,585,000 - \$1,858,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS:

General Construction:

- Both employee / side parking lots are showing signs of full depth cracks and open potholes. Storm structures are sinking and collapsing due to subsurface erosion.

Remove all existing asphalt drives and parking lots down to stone sub-base. Re-compact and add additional stone base as needed and install new asphalt binder and wearing courses. Rebuild / replace collapsed storm inlets, tops and associated pipe.

Priority Level (1-4): 1

Estimated Cost: \$375,000 - \$425,000

- Select portions of sidewalks were replaced in 2012. Sidewalks, stairs, and curbs are now cracking and shifting due to settlement causing a tripping hazard.

Replace select sidewalks, stairs, and curbs as needed to prevent further deterioration.

Priority Level (1-4): 2

Estimated Cost: \$130,000 - \$180,000

- The original exterior handrails at the lower level access walks are rusting and need cleaned and repainted.

Clean and paint exterior handrails. Replace with code required guards at adjacent steep elevation locations.

Priority Level (1-4): 2

Estimated Cost: \$40,000 - \$65,000

- The original chain link fence located at the perimeter of the lower ballfield has openings at damaged areas, peeling paint, and broken posts/rails.

Replace chain link fence due to age and added security.

Priority Level (1-4): 2

Estimated Cost: \$90,000 - \$115,000

- Partial roof replacement was performed in 2007 and 2015. Roof is comprised of a rubber membrane with stone ballast. The age of the older roof is unknown, but considering its poor condition, is likely out of its warranty period. Areas of this roof are ponding water, and seams are beginning to deteriorate. The leaks that occur are difficult to locate, due to the stone ballast on top of the roof membrane. The membrane is also pulling away from the metal edging at the perimeter, causing stress and possible tears.

Replace the roof with a new adhered rubber or modified bitumen roof system including new metal edging and any associated flashing.

Priority Level (1-4): 2

Estimated Cost: \$1,300,000-\$1,500,000

- The existing exterior metal panels were re-caulked in 2012 but are original to the building, rusting, and in need of replacement.

Replace the metal panels with new or a synthetic stucco type material.

Priority Level (1-4): 3

Estimated Cost: \$420,000 - \$470,000

- The existing exterior brick masonry walls are showing signs of brick and mortar deterioration due to weather and exposure.

Repair / repoint any brick and mortar joints; clean and seal all masonry surfaces to extend life of exterior walls.

Priority Level (1-4): 3

Estimated Cost: \$250,000 - \$300,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

General Construction (continued):

8. Exterior windows were replaced in 2011 but exterior aluminum window storefronts (in Cafeteria) leak air and water due to failing gaskets and weather-stripping. Overhead garage-type doors are also original and should be replaced.

Replace exterior aluminum windows in Cafeteria and overhead doors.

Priority Level (1-4): 3 **Estimated Cost: \$50,000 - \$75,000**

9. Wall paint throughout the building should be re-painted if a major renovation project occurs. Gymnasium wall and exposed ceiling paint needs to be scraped and painted.

Repaint all interior / exterior surfaces in building.

Priority Level (1-4): 4 **Estimated Cost: \$250,000 - \$300,000**

10. Lay-in acoustic ceilings are sagging due to humidity issues in building and are stained in several locations from roof and/or above ceiling equipment leaks.

Replace lay-in ceilings with new humidity resistant ceiling panels.

Priority Level (1-4): 4 **Estimated Cost: \$440,000 - \$490,000**

11. Original vinyl-composition tile (VCT) floors are present throughout building in classroom and office spaces. Carpet also exists in some select classroom spaces. Floors are worn due to age and beginning to delaminate in certain areas.

Replace VCT and/or carpet flooring in all instructional classroom and office spaces.

Priority Level (1-4): 4 **Estimated Cost: \$450,000 - \$500,000**

12. Terrazzo flooring in corridors are in fair condition, but can be grinded, polished and sealed to restore original finish and fill any unsightly cracks.

Refinish corridor terrazzo flooring.

Priority Level (1-4): 4 **Estimated Cost: \$145,000 - \$195,000**

13. Therapeutic pool ceramic tile within pool and on surrounding deck is delaminating due to moisture and water infiltration. Minor spot repairs have been made to alleviate tripping and sharp edge hazards, but other areas are also suspect for future problems. The gutter system leaks water, and the pool equipment needs to be replaced. The pool is currently not in use due to its current poor condition.

Replace pool / deck ceramic tile, gutter system, filtration equipment and deck equipment.

Priority Level (1-4): 1 **Estimated Cost: \$675,000 - \$775,000**

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

14. Assumed asbestos containing materials (ACM's) include miscellaneous pipe fittings and flanged gaskets in mechanical spaces. Perform an updated hazardous material inspection to confirm presence of asbestos materials, should a major building renovation occur.

All suspected asbestos containing materials should be regularly monitored and removed / contained by a certified abatement employee or Contractor, if damaged. Any major renovations that may affect ACM's should be sampled to confirm their existence and removed in their entirety prior to work occurring.

Priority Level (1-4): 2 Estimated Cost: \$25,000 - \$50,000
(Cost does not include replacement of removed materials.)
(Costs for new materials is included as other line items in this Study.)

Estimated General Construction Subtotal: \$4,640,000 - \$5,440,000

HVAC:

1. Existing hot and chilled water pumps are constant volume, leaking, and nearing 40 years old.

Replace hot and chilled water pumps and incorporate variable speed drives for energy savings.

Priority Level (1-4): 1 Estimated Cost: \$77,000 - \$105,000

2. The existing temperature control system and terminal control components are nearing 40 years old, is mostly pneumatic, and offers limited energy saving/building management capability.

- Upgrade ATC system to full DDC.

Priority Level (1-4): 1 Estimated Cost: \$902,000 - \$958,000

- Replace all existing pneumatic valves and damper actuators with electric type to compliment the ATC system conversion to DDC.

Priority Level (1-4): 1 Estimated Cost: \$162,000 - \$219,000

- To better manage energy consumption, incorporate demand control ventilation sequences to limit the amount of outside air brought into the building to match occupant load. Install CO2 sensors to manage air quality and energy control.

Priority Level (1-4): 1 Estimated Cost: \$ 39,000 - \$ 67,000

- Existing 3-way temperature control valves are nearing 40 years old and do not allow for variable speed pumping. Install new two-way temperature control valves on all terminal heating equipment to allow full throttling capability to the variable speed hot and chilled water pumps.

Priority Level (1-4): 1 Estimated Cost: \$210,000 - \$266,000

Estimated HVAC Temperature Controls Subtotal: \$1,313,000 - \$1,510,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

HVAC (continued):

3. Existing air handling units are in very poor condition. They frequently leak and require maintenance.

Replace air handling units. New units to include improved filtration, UV lighting and bipolar ionization to provide better air quality and virus protection.

Priority Level (1-4): 1 **Estimated Cost: \$900,000 - \$957,000**

4. Ductwork throughout the building is original and may need cleaning and insulation repair at damaged locations where work and/or leaks previously occurred.

Repair and clean ductwork. Further detailed evaluation can confirm extent of scope of repairs needed.

Priority Level (1-4): 1 **Estimated Cost: \$282,000 - \$338,000**

5. Exhaust fans are in poor condition and do not provide adequate ventilation to spaces.

Replace exhaust fans.

Priority Level (1-4): 1 **Estimated Cost: \$ 63,000 - \$ 92,000**

6. Existing variable air volume (VAV) boxes are in poor condition and require routine maintenance.

Replace VAV boxes.

Priority Level (1-4): 1 **Estimated Cost: \$507,000 - \$563,000**

7. Terminal heating equipment may potentially be reused if determined to be in an operable condition.

Replace terminal equipment such as convectors and finned-tube radiation if necessary.

Priority Level (1-4): 2 **Estimated Cost: \$ 68,000 - \$ 96,000**

8. X-ray testing has confirmed the existing hot and chilled water distribution piping to be in poor condition and not appropriate for long term reuse.

Replace existing hot and chilled water piping systems from central plant to and thru building.

Priority Level (1-4): 1 **Estimated Cost: \$1,165,000 – \$1,277,000**

Estimated HVAC Subtotal: \$4,375,000 - \$4,938,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

Plumbing:

1. Replace all existing plumbing gate valves, isolation valves, balancing stations, and any additional in-line plumbing equipment.
Priority Level (1-4): 1 **Estimated Cost: \$113,000 - \$169,000**

2. Install grease interceptors for food service/preparation areas to avoid frequent clogs and backups in sanitary lines.
Priority Level (1-4): 1 **Estimated Cost: \$135,000 - \$192,000**

3. Replace original steam water heaters. Consider water-to-water hot water generators if central steam is converted to hot water only. Other considerations include gas fired domestic water heaters if the gas service is extended from the Power House to Mon Valley.
Priority Level (1-4): 1 **Estimated Cost: \$ 85,000 - \$113,000**

4. Extend gas service from Power House to Mon Valley to serve new hot water heaters.
Priority Level (1-4): 1 **Estimated Cost: \$ 57,000 - \$ 85,000**

5. Replace domestic hot water recirculation pumps.
Priority Level (1-4): 2 **Estimated Cost: \$ 57,000 - \$ 85,000**

6. Video inspection of the underground sanitary drainage systems should be performed prior to the development of any renovation project.
Priority Level (1-4): 1 **Estimated Cost: \$ 54,000 - \$ 83,000**

7. A central thermostatic mixing valve with thermometer indicator should be provided at the hot outlet of water heater. Presently there are none installed to prohibit an excessive high temperature event. Water heater system to be set above 140 degrees Fahrenheit to help prevent Legionella.
Priority Level (1-4): 1 **Estimated Cost: \$ 23,000 - \$ 51,000**

8. Power rodding and pressure flushing of interior underground sanitary drain lines should be included in short and/or long term planning.
Priority Level (1-4): 1 **Estimated Cost: \$ 74,000 - \$102,000**

9. X-ray testing has confirmed the existing domestic hot and cold water distribution piping to be in good condition for long term reuse.
Priority Level (1-4): 0 **Estimated Cost: \$0**

- Estimated Plumbing Subtotal: \$598,000 - \$880,000**

2. BUILDING INFRASTRUCTURE IMPROVEMENTS (continued):

Electrical:

1. The lighting fixtures in the building including the 1x4 wrap around fluorescent fixtures have cracked and discolored lenses. The lamps in the fixtures have recently been retrofitted to LED, but the original fixtures remain. These fixtures are original to the building. Some of the existing exit signs are older LED's and not lighting up adequately.

Replace the light fixtures exit signs, and controls in the building with LED fixtures and occupancy / dimming controls for energy savings. Consider LED color tuning or RGBW lighting in rooms that require blue lighting.

Priority Level (1-4): 2 **Estimated Cost: \$704,000 - \$760,000**

2. The existing emergency generator and transfer switch was recently replaced. The area protection panel is original to the building and should be replaced due to its age and condition.

Replace existing area protection panel and install GTD's for switched emergency lighting.

Priority Level (1-4): 1 **Estimated Cost: \$34,000 - \$62,000**

3. The PA system consists of speakers and call buttons in the classrooms and speakers in the corridors. The system is original to the building and should be replaced due to age.

Replace the existing PA system.

Priority Level (1-4): 2 **Estimated Cost: \$141,000 - \$169,000**

4. Existing original FPE switchgear, panelboards, bus duct, and feeders are original to the building and should be replaced due to age and condition. Some have been replaced due to failures.

Replace remaining existing FPE distribution equipment including feeders.

Priority Level (1-4): 1 **Estimated Cost: \$422,000 - \$479,000**

5. Original building branch circuits and devices are original to the building.

Replace original branch circuits and devices.

Priority Level (1-4): 2 **Estimated Cost: \$422,000 - \$479,000**

6. Determine the needs, existing conditions, and upgrades to the telecommunications / data cabling and telephone handsets.

Upgrade existing telecommunications cabling to Cat 6 or better.

Priority Level (1-4): 3 **Estimated Cost: \$141,000 - \$197,000**

7. Perform electrical work related to mechanical system recommendations identified above.

Provide electrical work for mechanical recommendations.

Priority Level (1-4): 1 **Estimated Cost: \$225,000 - \$282,000**

Estimated Electrical Subtotal: \$2,089,000 - \$2,428,000

2. BUILDING INFRASTRUCTURE IMPROVEMENTS TOTAL:

\$11,702,000 - \$13,686,000

3. EDUCATIONAL PROGRAM IMPROVEMENTS:

1. Instructional classrooms have original chalkboards which are outdated for today's instructional needs.

Replace aging chalkboards with new white marker boards throughout building.

Priority Level (1-4): 4 Estimated Cost: \$105,000 - \$130,000

2. Classrooms also lack audio and visual technology integrated with projectors / smart boards to meet today's educational programs.

Install new classroom projectors integrated with computer / audio / visual teacher's station.

Priority Level (1-4): 4 Estimated Cost: \$590,000 - \$690,000

3. Built-in cabinets and shelving throughout the school are original and are worn from use. Countertops do not meet heights and sizes required by ADA guidelines.

Replace existing built-in cabinets, shelving and countertops.

Priority Level (1-4): 4 Estimated Cost: \$700,000 - \$800,000

4. Several pieces of food service / kitchen equipment have been replaced over recent years, but others are still original and do not have parts availability for repairs.

Replace remaining food service equipment and associated electrical, plumbing, and HVAC connections.

Priority Level (1-4): 4 Estimated Cost: \$700,000 - \$800,000

5. School personnel requested installing more windows in classroom / instructional areas on first floor to provide additional natural light for occupants.

Install additional exterior windows in classrooms at first floor level. (Estimated cost is in addition to metal panel replacement identified in #5 under Building Infrastructure Improvements above).

Priority Level (1-4): 4 Estimated Cost: \$640,000 - \$740,000

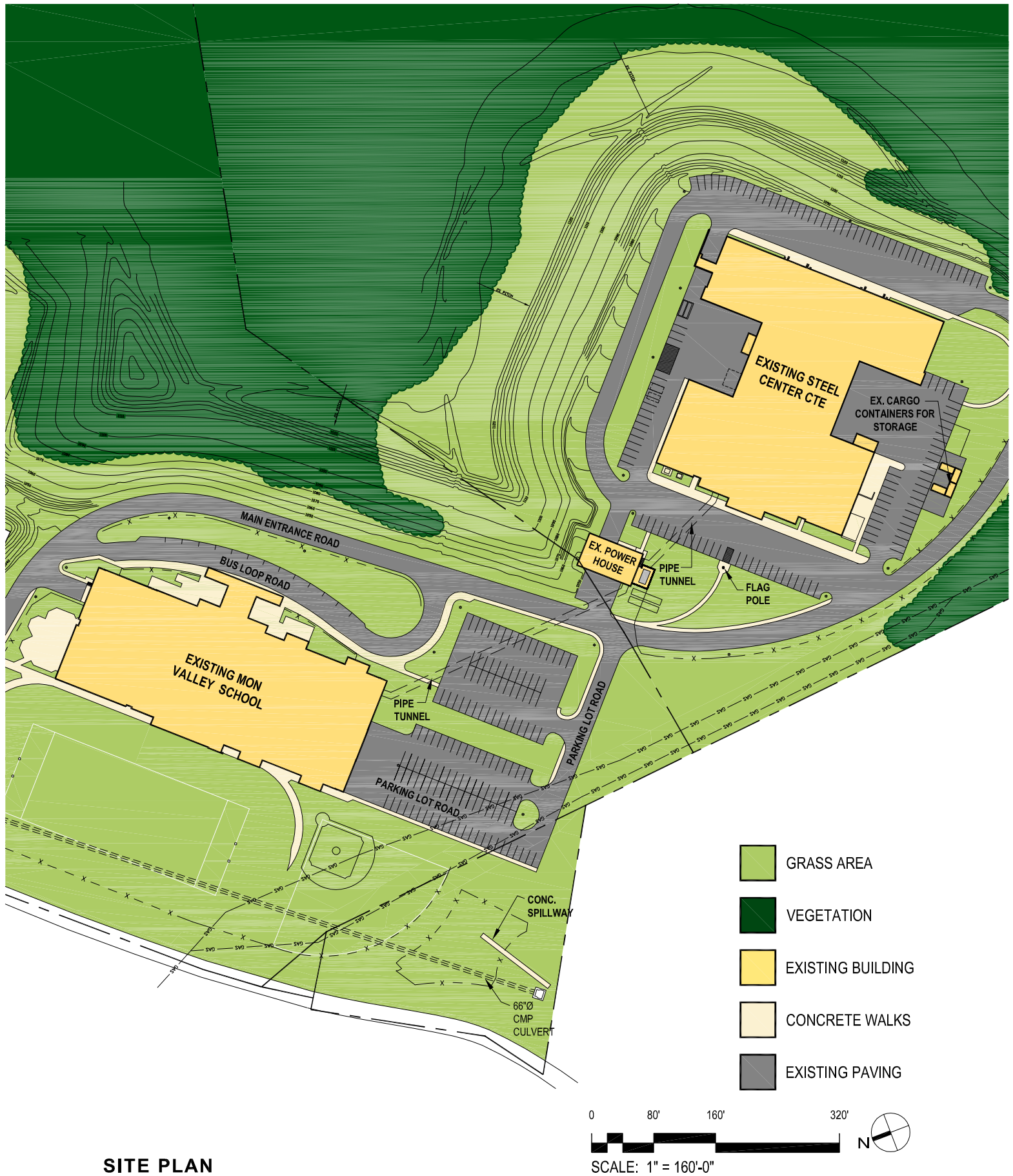
6. Air compressors in shops / labs need to be replaced.

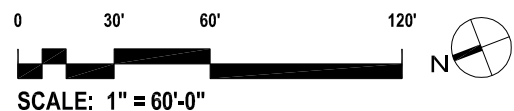
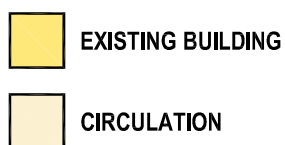
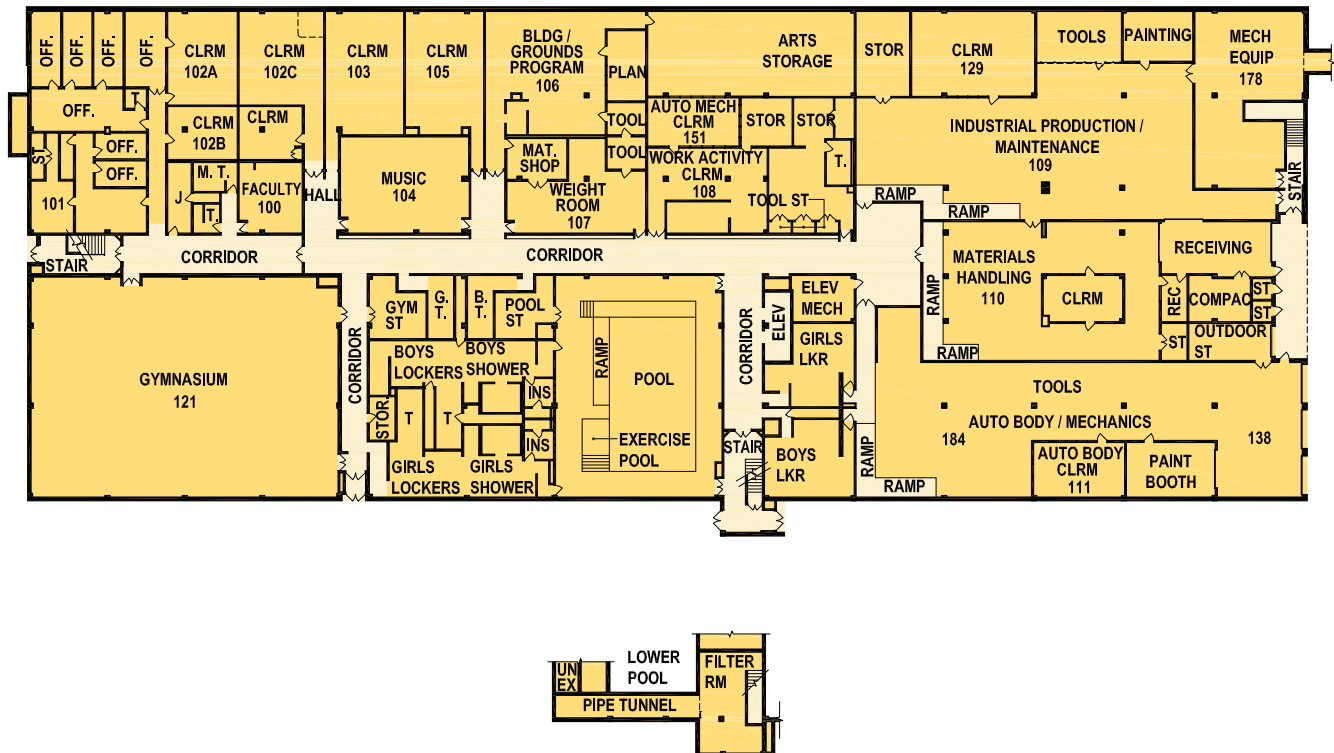
Replace original air compressors in shops/labs.

Priority Level (1-4): 3 Estimated Cost: \$74,000 - \$102,000

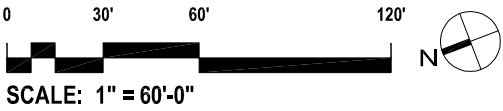
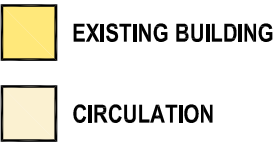
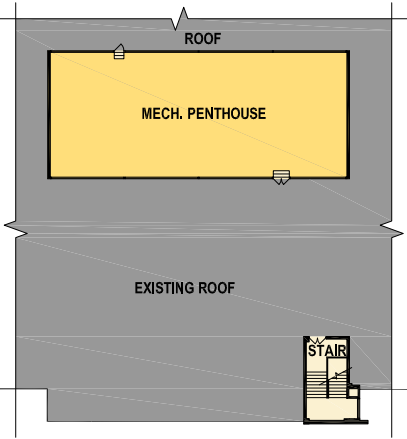
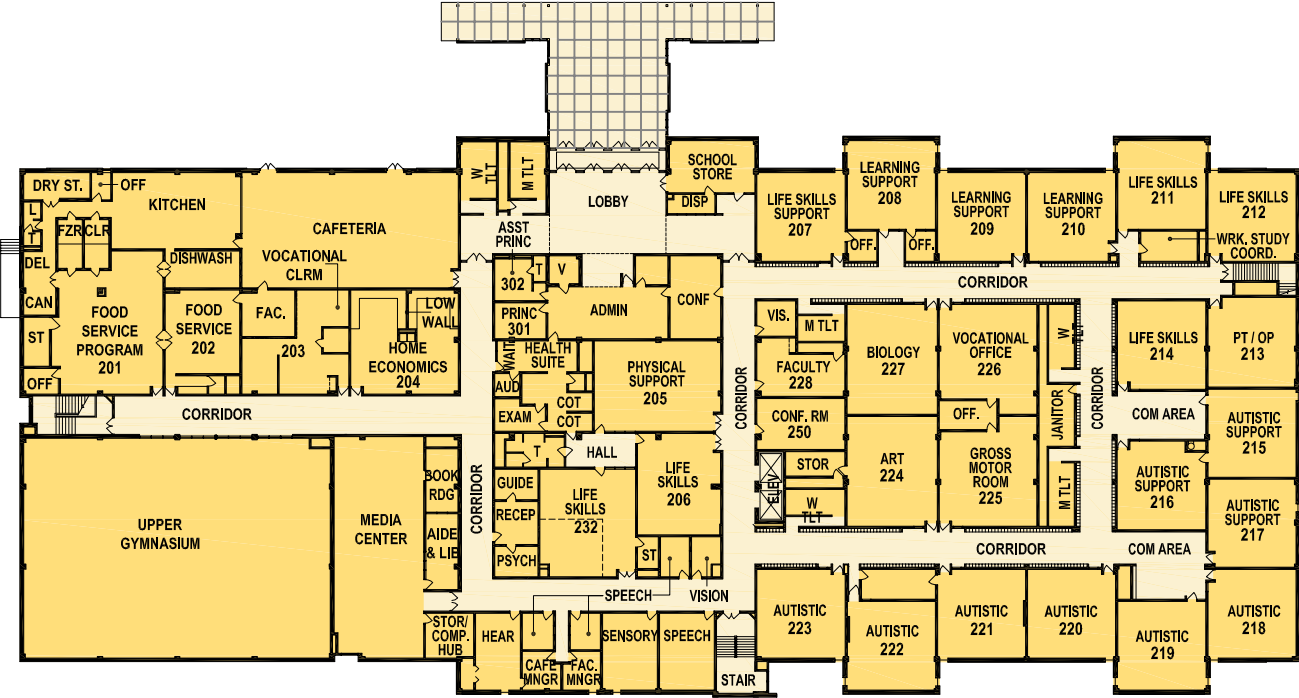
3. EDUCATIONAL PROGRAM IMPROVEMENTS TOTAL: \$2,809,000 - \$3,262,000

ESTIMATED MON VALLEY SCHOOL TOTAL: \$16,096,000 - \$18,806,000





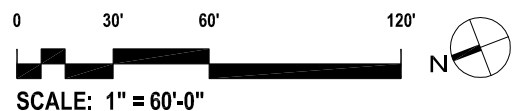
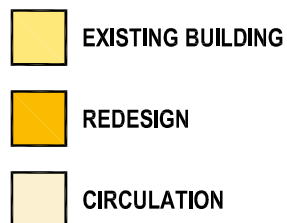
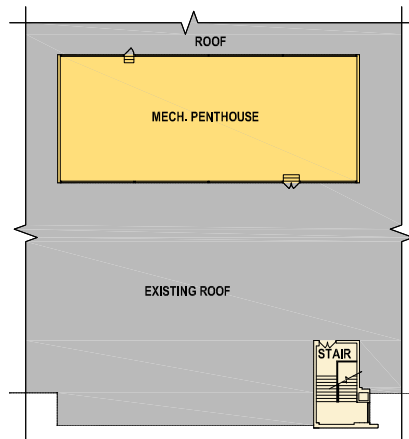
GROUND FLOOR PLAN



FIRST FLOOR PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN

Steel Center/Power House Options

	Option 1 Existing Building Improvements	Option 2 Existing Building Improvements & ALL Program Improvements	Option 3 Existing Building Improvements & Select Program Improvements (Diesel and Culinary/Bakery Programs)
<u>A. Construction Cost Range</u>			
Code Required/Safety Improv'ts.	\$2,135,000 - \$2,459,000	\$2,135,000 - \$2,459,000	\$2,135,000 - \$2,459,000
Building Infrastructure Improv'ts.	12,270,000 - 14,148,000	12,270,000 - 14,148,000	12,270,000 - 14,148,000
Educational Program Improv'ts.	0 - 0	6,565,000 - 7,935,000	2,715,000 - 3,090,000
Power House	1,458,000 - 1,916,000	1,458,000 - 1,916,000	1,458,000 - 1,916,000
SUBTOTAL CONSTRUCTION	\$15,863,000 - \$18,523,000	\$22,428,000 - \$26,458,000	\$18,578,000 - \$21,613,000
<u>B. Related Costs Range</u>			
Soft Costs (design/engineering, approvals, contingency, etc.)	3,173,000 - 3,705,000	4,486,000 - 5,292,000	3,716,000 - 4,323,000
Financing	318,000 - 371,000	449,000 - 530,000	372,000 - 433,000
Cost Escalation (1 year)	238,000 - 278,000	337,000 - 397,000	279,000 - 325,000
SUBTOTAL RELATED	\$3,729,000 - \$4,354,000	\$5,272,000 - \$6,219,000	\$4,367,000 - \$5,081,000
<u>C. Total Project Cost Range</u>			
Steel Center CTE / Power House	\$19,592,000 - \$22,877,000	\$27,700,000 - \$32,677,000	\$22,945,000 - \$26,694,000

Mon Valley School Options

	Option 1 Existing Building Improvements	Option 2 Existing Building Improvements & ALL Program Improvements
A. Construction Cost Range		
Code Required/Safety Improv'ts.	\$1,585,000 - \$1,858,000	\$1,585,000 - \$1,858,000
Building Infrastructure Improv'ts.	11,702,000 - 13,686,000	11,702,000 - 13,686,000
Educational Program Improv'ts.	0 - 0	2,809,000 - 3,262,000
SUBTOTAL CONSTRUCTION	\$13,287,000 - \$15,544,000	\$16,096,000 - \$18,806,000
B. Related Costs Range		
Soft Costs (design/engineering, approvals, contingency, etc.)	2,658,000 - 3,109,000	3,220,000 - 3,762,000
Financing	266,000 - 311,000	322,000 - 377,000
Cost Escalation (1 year)	200,000 - 234,000	242,000 - 283,000
SUBTOTAL RELATED	\$3,124,000 - \$3,654,000	\$3,784,000 - \$4,422,000
C. Total Project Cost Range		
Steel Center CTE / Power House	\$16,411,000 - \$19,198,000	\$19,880,000 - \$23,228,000

BUDGET SUMMARY AND OPTIONS COMPARISON

Combined Building Options Totals

	Option 1 Existing Building Improvements	Option 2 Existing Building Improvements & ALL Program Improvements	Option 3 Existing Building Improvements & Select Program Improvements
<u>A. Construction Cost Range</u>			
Steel Center CTE/Power House	\$15,863,000 - \$18,523,000	\$22,428,000 - \$26,458,000	\$18,578,000 - \$21,613,000
Mon Valley School	\$13,287,000 - \$15,544,000	\$16,096,000 - \$18,806,000	\$16,096,000 - \$18,806,000
SUBTOTAL CONSTRUCTION	\$29,150,000 - \$34,067,000	\$38,524,000 - \$45,264,000	\$34,674,000 - \$40,419,000
<u>B. Related Costs Range</u>			
Steel Center CTE/Power House	\$3,729,000 - \$4,354,000	\$5,272,000 - \$6,219,000	\$4,367,000 - \$5,081,000
Mon Valley School	\$3,124,000 - \$3,654,000	\$3,784,000 - \$4,422,000	\$3,784,000 - \$4,422,000
SUBTOTAL RELATED	\$6,853,000 - \$8,008,000	\$9,056,000 - \$10,641,000	\$8,151,000 - \$9,503,000
<u>C. Total Project Cost Range</u>			
	\$36,003,000 - \$42,075,000	\$47,580,000 - \$55,905,000	\$42,825,000 - \$49,922,000
	OPTION 1 TOTAL	OPTION 2 TOTAL	OPTION 3 TOTAL

Appendix:



SUMMARY OF MEETING NO. 1

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education
Mon Valley School
Facilities Plan

Project No. #4167

Date: April 15, 2021 at 4:00 pm

Purpose of Meeting: Attend Public Safety Industry Partner Committee
via Zoom

In Attendance:
Steel Center CTE

Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com
Mrs. Nichole Zeigler, Public Safety Instructor
412.469.3200 x2507 nzeigler@steelcentertech.com
Ms. Nancy Stynchula, Industry Partner
Mr. Ted Zeigler, Industry Partner
Mr. Richard Kaufman, Industry Partner
Ms. Odessa McDermott-Grubb, Industry Partner
Mr. Todd Plunkett, Industry Partner
Mr. Sean Kundrat, Industry Partner
Matt Franz, Frank Gargiulo

HHSDR Architects/Engineers

1. When discussion of the space needs began, Mrs. Zeigler turned the program over to Mr. Franz, who explained that HHSDR was assisting SCCTE with an update of the Facilities Plan, and that HHSDR would be attending the IPC meetings to ask for input on facilities needs by career major. He shared a floor plan from a prior study with everyone for reference.
2. Mrs. Zeigler reported that the stairs and loft were constructed in the current Protective Services space (now known as Public Safety) to simulate a house and facilitate rescue training.
3. Mrs. Zeigler stated students use Chromebooks on a cart, not a fixed computer lab.
4. Mr. Franz noted that the School should be careful with the construction of lofts, which are not permitted by code.
5. Mr. Rice noted that the current space does not allow for the storage of all rescue vehicles (fire truck, police car and ambulance). Additional locker room space is needed. The current space also accommodates the house mock-up, a classroom (due to COVID-19 protocols) and storage space.
6. Mr. Rice noted that the vacant space opposite the locker rooms, classroom, offices and toilets is available for Public Safety to use. The classroom would return to normal use once COVID-19 protocols are over. This space is used for hands-on demonstrations (CPR, bleed stop, etc.). The extra locker room would also be advantageous for students to use; currently they go elsewhere in the building to a separate locker room and return.

7. Discussion took place regarding potential relocation of the house mock-up to the vacant space, which could also store some vehicles if garage door access existed. HHSDR to examine the possibility of creating a garage door for vehicular access to the space.
8. Mr. Franz noted the toilet rooms between the Public Safety and vacant rooms are undersized and will need to be reconfigured.
9. Mr. Rice stated that one (1) Instructors Office is suitable for two (2) teachers.
10. Mr. Rice noted that storage space is at a premium.
11. Mrs. Zeigler noted the space shown as ST and TL in the Public Safety space may be repurposed.
12. Mr. Rice noted the spaces shown as ST and TOOL in the currently vacant space is used as general building storage.
13. Mr. Rice guided the attendees through a tour of Public Safety, which is available on the School web site under the Public Safety career major link. He stated that this program has a high enrollment.



SUMMARY OF MEETING NO. 2

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education
Mon Valley School
Facilities Plan

Project No. #4167

Date: April 21, 2021 at 11:00 am

Purpose of Meeting: Attend Health Assistants Program
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE

Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com
Mrs. Jennifer Kastronis, Health Assistant Instructor
412.469.3200 x2520 jkastronis@steelcentertech.com
Mr. Nick Avrilla, Industry Partner
Ms. Geneva Bradley, Industry Partner
Ms. Bobbie Kasten, UPMC, Industry Partner
Ms. Beth Wysocki, Industry Partner
Ms. Amy Ulander, Industry Partner
Ms. Lynn Lunardi, Industry Partner
Matt Franz, Frank Gargiulo

HHSDR Architects/Engineers

1. A phone is desired in the Lab area.
2. Updated countertops and cabinets in two areas of the Lab are desired.
3. The current program spaces for the Health Assistants Program are the current plan labels of "Health Assistants Classroom" and the "Health Assistant Lab". No other "Health" labeled plan areas are related to this CIP Code program.
4. Glass windows are desired between the Health Assistant Classroom and their Lab. Possibly eliminate the current Office area.
5. The room labeled "Rec. Stg." Is a Health Lab.
6. The room labeled "Health Classroom" is really a Learning Facilitator Room (next to Faculty Room).



SUMMARY OF MEETING NO. 3

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education
Mon Valley School
Facilities Plan

Project No. #4167

Date: April 21, 2021 at 12:00 am

Purpose of Meeting: Attend Collision Repair and Refinishing Program
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE
Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com
Mr. Patrick Canavan, Collision Repair & Refinish. Instructor
412.469.3200 x2511 pcanavan@steelcentertech.com
Mr. Ethan Kemmler, Industry Partner
HHSDR Architects/Engineers Matt Franz, Frank Gargiulo

1. The plan is accurate as shown.
2. The Paint Room also has 3 bays.
3. The Paint Booth is propane fueled.
4. The two unlabeled rooms are storage, shared with Welding.
5. No loft exists in the two main rooms. Above Flammable Storage, a loft does exist.
6. The room labeled "Stor" is really a classroom.
7. This program is acquiring additional equipment.



SUMMARY OF MEETING NO. 4

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

- Project: Steel Center for Career and Technical Education
Mon Valley School
Facilities Plan
- Project No. #4167
- Date: April 22, 2021 at 7:20 pm
- Purpose of Meeting: Attend Building Trades and Maintenance Program
Industry Advisory Committee via Zoom
- In Attendance:
- | | |
|----------------------------|---|
| Steel Center CTE | Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com |
| | Mr. Nolan Bergamasco, Instructor
412.469.3200 x2501 nbergamasco@steelcentertech.com |
| HHSDR Architects/Engineers | Matt Franz, Frank Gargiulo |
1. Mr. Rice introduced staff from HHSDR. He described the study process Steel Center is undertaking, with the goal of planning for physical improvements to the program spaces.
 2. Mr. Franz displayed a floor plan of the program area for discussion.
 3. Mr. Bergamasco stated the floor drains are poor, due to construction dust accumulating when practice pods were built. The pods are used to train students on various building techniques. A dust collection and air filtration system is needed.
 4. Mr. Bergamasco stated sink traps are also clogging due to the wet cleaning of tools. He suggested long troughs in which tools can be set to dry before being cleaned off the next day in garbage bins.
 5. A storage loft exists over the tool storage area, lower left corner of Building Trades room.
 6. An air handling unit is located in upper left corner of plan for space.
 7. Mr. Bergamasco would like to see a window installed between the Building Trades Classroom and Building trades room.
 8. The partition in the Building Trades Classroom is not used.
 9. The HVAC Classroom door is closed off now from the Building Trades room.
 10. There is currently a 20' x 40' pad installed outside Building Trades, used as a cutting and work area. He would also like to see a fenced in area from the man door to the top right-hand corner of the Building Trades space.
 11. Electrical capacity to power equipment is lacking.



SUMMARY OF MEETING NO. 5

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167

Date: April 26, 2021 at 4:00 pm

Purpose of Meeting: Attend Culinary Arts Program
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE

Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com
Mrs. Robin L. White, Assistant Director: Principal
412.469.3200 rwhite@steelcentertech.com
Mr. Adam Mika, Instructor
412.469.3200 x2555 amika@steelcentertech.com
Ms. Gina Hoensworth, Industry Partner
Mr. Mark Fickes, Mr. Matt Bennett, Industry Partners
Mr. Kirk Kabus, Mr. Mike Mehanish, Industry Partners
Mr. Riley Archie, Industry Partner
Matt Franz

HHSDR Architects/Engineers

1. Mr. Mika described new equipment purchased using propane gas: a 10-burner stove, a 36" grille, and an 80 pound deep fryer.
2. Mr. Mika still desires the installation of natural gas for use as a cooking fuel.
3. A dishwasher remains to be purchased, but this will be delayed until future renovations are decided.
4. Bakery and Culinary both want to integrate retail and customer interaction. The current restaurant/café can be expanded and include a pastry counter and a multi-functional area with a service center and a dining space.
5. The currently labeled "Office" is now the Dry Storage room.
6. The Classroom is currently too remote from the Kitchen.
7. One possibility is to relocate the Bakery to the former Meat Cutting area along with a new Culinary Classroom, and creating the Dining Room in the former Bakery Lab. This arrangement would provide outside access for the public.
8. Boys/Girls Locker Rooms could be located in the former Culinary Classroom and current Boys/Girls Locker Room could become Instructors' offices.
9. Label the room currently shown as "Classroom" as "Vacant Food Lab".
10. All coolers/freezers need to be replaced.



SUMMARY OF MEETING NO. 6

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167

Date: April 28, 2021 at 5:30 pm

Purpose of Meeting: Attend Advertising and Design Program
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE
Mr. Scott Kane, Instructor
412.469.3200 x5231 skane@steelcentertech.com
Mr. Jim Ford, Industry Partner
Ms. Kayla Gray, Industry Partner
Mr. Tony Zimmer, Industry Partner
Mr. Anthony Driscoll, Industry Partner
Mr. Mike Sall, Industry Partner
Mr. Cheryl Frantzen, Industry Partner
Others in attendance I could not hear.
Frank Gargiulo

HHSDR Architects/Engineers

1. Mr. Kane used the viewer on the School website to give a tour of the program spaces.
2. This program is housed in three rooms, all labeled as Advertising and Design. However, the room with the Storage Room should be labeled Production Room. The Storage Room has a sink in it for screen printing.
3. Computer Lab A, although accessed from within Advertising and Design as well as the Lobby Commons, is shared with other programs.
4. A counter no longer exists in the room immediately behind Computer Lab A.
5. Mr. Kane stated the program has ample space. However, the Photo Studio is a makeshift area along the wall with Computer Lab A. Is it possible to take part of Computer Lab A and make it a Photo Lab?
6. Mr. Kane likes the windows looking out at the Lobby Commons, and hopes they remain.
7. No new equipment is coming in addition to what already exists. Only replacement equipment is planned.



SUMMARY OF MEETING NO. 7

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and Mon Valley School Facilities Plan

Project No. #4167

Date: April 29, 2021 at 5:00 pm

Purpose of Meeting: Attend Automotive Technology Industry Advisory Committee via Zoom

In Attendance:

Steel Center CTE	Mr. Kevin Rice, Executive Director 412.469.3200 x6741 krice@steelcentertech.com
	Mr. Michael Castelli, Instructor 412.469.3200 x2513 mcastelli@steelcentertech.com
	Mr. Rob _____, Industry Partner
	Mr. Van Treese, Industry Partner
	Damien (student) and family
HHSDR Architects/Engineers	Frank Gargiulo

1. Mr. Gargiulo used the viewer on the School website to tour the program spaces.
2. The Auto Mechanics label should be renamed Automotive Technology on the floor plan. The plan is missing a third column located near the Tool Locker. The plan is also missing a second entry into the Locker Room.
3. Mr. Rice stated the program has sufficient space.
4. Mr. Castelli stated that lighting is poor. Duquesne Light implemented a program recently to update lights with LED however, more is needed.
5. Mr. Castelli stated the electrical grid is overloaded. They need more power.
6. Mr. Castelli stated storage is lacking and is needed. Four (4) cargo containers exist outside the program space, which have helped.
7. Mr. Rice stated that the neighboring Building Maintenance space has a former classroom that is now used as additional Building Maintenance storage. This classroom could be repurposed and accessed by Automotive Technology.
8. Mr. Castelli stated heat is not getting to the classroom.
9. Mr. Castelli and others present supported the idea of swapping out panels at the top of the garage doors with opaque material to allow natural light into the space.
10. Bathrooms need to be renovated.



SUMMARY OF MEETING NO. 8

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

- Project: Steel Center for Career and Technical Education and Mon Valley School Facilities Plan
- Project No. #4167
- Date: April 29, 2021 at 5:20 pm
- Purpose of Meeting: Attend HVAC – Refrigeration Industry Advisory Committee via Zoom
- In Attendance:
- | | |
|----------------------------|--|
| Steel Center CTE | Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com |
| | Mr. Brian McCrory, Instructor
412.469.3200 x2507 bmccrory@steelcentertech.com |
| | Mr. Matt Cain, Industry Partner |
| | Mr. John Phillips, Industry Partner |
| | Mr. Lucas Gonzales, Industry Partner |
| | Ms. Mary Ann Batchelor, Industry Partner |
| HHSDR Architects/Engineers | Frank Gargiulo |
1. Mr. Rice introduced the Committee to HHSDR and discussed the study update.
 2. Mr. Gargiulo toured the space on the SCCTE website. The plan should read HVAC-R.
 3. Mr. McCrory stated that the hot water lines, sinks and air handlers are shot. Better handwashing facilities are needed.
 4. Ms. Batchelor stated that eye wash stations are needed.
 5. The mezzanine areas have been modified and extended so that they encircle the entire teaching space. This level is partly used for storage of sheet metal equipment and partly for teaching. The sheet metal room is located upstairs.
 6. Mr. Rice stated the HVAC-R classroom is now sealed from the Building Trades side, so that it is only used by HVAC-R.
 7. Mr. McCrory stated the lack of physical working space makes teaching difficult. Workstations are only 3' apart.
 8. Mr. McCrory asked if the loft areas could be extended overhead into the teaching space so that conduits and piping can be run vertically for teaching (in other words a complete 2nd floor).
 9. Storage is lacking. Outdoor container storage is inadequate.
 10. Mr. Rice did not rule out a steel structure addition with garage doors for this program.
 11. Ms. Batchelor stated that girls need a closer locker room location to this shop.
 12. Mr. McCrory stated that teaching occurs in the shop area, and so the classroom could be converted into storage. The main area needs workbenches or workstations spaced as required.



SUMMARY OF MEETING NO. 9

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167

Date: April 29, 2021 at 6:00 pm

Purpose of Meeting: Attend Carpentry
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE
Mr. Kevin Rice, Executive Director
412.469.3200 x6741 krice@steelcentertech.com
Mr. Ted Pavlack, Instructor
412.469.3200 x2528 tpavlack@steelcentertech.com
Others not introduced.

HHSDR Architects/Engineers Frank Gargiulo

1. Mr. Gargiulo toured the space on the SCCTE website.
2. A loft has been constructed at the entrance to the program area.
3. The Office should be relabeled Storage on the plan.
4. The Storage Room should be relabeled Tool Storage on the plan.
5. The larger space marked T seems to be a hand washing station only.
6. Mr. Pavlack stated that the Locker Room is too large, and that the classroom could be extended into it.
7. The exterior shed needs to be storage for lumber, but without temperature controls. This may require modification of the louver above the garage door. This shed is not shown on the plan but is represented by a bracket shape.



SUMMARY OF MEETING NO. 10

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167
Date: April 30, 2021 at 7:00 pm

Purpose of Meeting: Attend Computer Technology
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE Ms. Robin White, Assistant Director/Principal
412.469.3200 x6745 rwhite@steelcentertech.com
Mr. Xavier Harmon, Instructor
412.469.3200 x2505 xharmon@steelcentertech.com
Caleb Knorr, Industry Partner
Jordon Burnsworth, Industry Partner
Samuel Carlson, Industry Partner
HHSDR Architects/Engineers Frank Gargiulo

1. Mr. Gargiulo toured the space on the SCCTE website.
2. The space should be labeled Computer Technology. A new room has been created on the left immediately upon entering space, presumably for storage but this was not clarified.
3. Ms. White introduced the Committee to HHSDR and explained the purpose of the Study.
4. Enrollment for the program is typically 25, but currently the AM session has over 30, and the PM session has 29. Interest in this program is high.
5. Every five (5) years, APE Chapter 339 audits the program for next year reapproval. The next audit is scheduled for December 2021.
6. Mr. Harmon stated that not enough space exists. He wants another classroom. The program has two storage rooms.
7. Mr. Gargiulo asked about Computer Lab A on the first floor. Ms. White stated that this room is an open lab, and that it is shared and scheduled among several programs.
8. Mr. Harmon suggested removing the wall between Computer Tech and Workforce Development (which is part of the Exercise Science and Rehabilitation Program, new in 2021-2022). This program is located in the area labeled Rehabilitation Services on this plan.
9. Mr. Harmon also asked if an addition was possible, and if cutting in windows is possible.
10. Mr. Harmon stated that power is also lacking (they use servers, computers and desire air conditioning for this equipment).
11. Mr. Harmon also stated that lighting levels are higher than needed, causing glare issues.
12. During discussion of potential spaces and program relocations, Ms. White explained that the Veterinary Assistant program (new for 2021-2022) took over former office space on the first floor at the north lobby. The thinking was isolating an area of the building for easy entry/exit of pets. Question: Could this be an outbuilding to recapture the space?



SUMMARY OF MEETING NO. 11

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167
Date: May 4, 2021 at 7:00 pm

Purpose of Meeting: Attend Electrical Program
Industry Advisory Committee via Zoom

In Attendance:
Steel Center CTE
Ms. Robin White, Assistant Director/Principal
412.469.3200 x6745 rwhite@steelcentertech.com
Mr. Bob Eagleson, Instructor
412.469.3200 x2510 beagleson@steelcentertech.com
Brad Ellwood, Industry Partner
Brian Owens, Industry Partner
Chad Matuszak, Industry Partner
Justin Matuszak, Industry Partner
Garrison Miller, Industry Partner
Matthew Franz

HHSDR Architects/Engineers

1. Wash fountain is not working in the Lab space. A new stainless-steel sink is preferred.
2. Hot water sinks are not working.
3. Double doors were previously removed between the two labs.
4. Electrical Lab 108 is located on the left side of plan and 107 is on the right side.
5. The rear of 108 is the utility power training area. An idea was presented to include an educational underground burial area at the rear of the space.
6. Duquesne Light recently donated to the school to retrofit existing light fixtures to LED lamps throughout the school.



SUMMARY OF MEETING NO. 12

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project:	Steel Center for Career and Technical Education and Mon Valley School Facilities Plan
Project No.	#4167
Date:	May 28, 2021 at 1:00 pm
Purpose of Meeting:	Review Study Progress
In Attendance:	
Steel Center CTE	Kevin Rice, Administrative Director Dave Hall, Director of Maintenance
HHSR Architects/Engineers	Matthew Franz, Luis Caraballo, Frank Gargiulo

1. Mr. Franz reviewed the schematic site and floor plans.
2. Mr. Hall stated that LED replacement involves just the bulbs, not the entire fixtures.
3. Mr. Rice stated that ADA and eyewash station improvements are universal for all programs. Mr. Franz suggested converting stairs to ramps wherever possible.
4. Collision Repair Needs: No improvements requested, other than required ADA upgrades.
5. Adjacent to Collision Classroom and Storage, the proposed plan calls for an enlarged Girls Locker Room to be shared with all downstairs labs.
6. Mr. Rice may require the two (2) corridor toilet rooms adjacent to the proposed Girls Locker Room to remain as well.
7. Diesel Tech Needs: Robert Burgy, Instructor, joined us. He agreed with the proposed addition, angle for the vehicles and garage entry. Portable wheel hoists allow for better use of space. Water infiltration is occurring along the south wall.
8. Mr. Rice stated the Diesel Classroom is really used as a special education space right now. The Diesel Tech Annex may serve as a future Motorsports Program space.
9. Automotive Technology Needs: additional lighting and space is desired. The potential exists to incorporate part of the Maintenance Storage Room to enlarge the Automotive Tech Classroom. This program could also use the Diesel Tech Annex as a contingency.
10. Building Maintenance Needs: the space is oversized and lacks more efficient outdoor access for vehicles and deliveries. One option is to take part of the Maintenance Storage Room and convert it as a larger Receiving space. Option #2 is to relocate Building Maintenance to the Public Safety Lab #2 space. Option #3 is to relocate Building Maintenance to the Electrical Labs (#1 and #2). Geothermal wells are located in front of HVAC, so any building addition here would need to occur to the west. Also, utilities will need to be extended into the former Building Maintenance space, if used as an instructional lab.
11. Building Trades Needs: this space generates construction dust and debris and requires air collection and filtration. Prior activity in this space has clogged drains. Additional power is needed. A new window is desired between classroom and lab. The outside work area should be fenced in. Mr. Rice would like to see this program create permanent improvements for the property (such as retaining walls, hardscape, etc.).

12. HVAC-Refrigeration Needs: new hand and eyewash stations, larger workstations in the workshop area, additional storage. Also, possibly consider a building addition for this program to accommodate additional space needs. A new Girls Locker Room is proposed in the corridor adjoining Veterinary Tech. Farther down the corridor toward Public Safety, two (2) toilet rooms are proposed to be designated as "Unisex". An alternative would be to convert the Locker Room adjacent to Electrical Lab #1 into a Girls Locker Room.
13. Veterinary Assistant Needs: Mr. Rice agrees with the direct outside access, which would be controlled by this program. Any work required here will be done in-house.
14. Public Safety Lab #2: Mr. Rice and Mr. Hall stated the proposed garage door is required. The proposed plan also shows an enlarged Locker Room.
15. Electrical Needs: the proposed improvements call for new stainless steel sinks and new underground electrical teaching area. The space labeled Instructional Plan Center is used as a Classroom. Mr. Hall stated that a future contingency could be to swap the spaces occupied by Building Maintenance and Electrical.
16. Carpentry Needs: the proposed plan shows an enlarged Classroom.
17. A meeting with the Welding Program needs to be scheduled.
18. A meeting with the Cosmetology Program needs to be scheduled.
19. A meeting with Student Services needs to be scheduled.
20. A meeting with the Health Office needs to be scheduled.
21. Bakery/Culinary Arts Needs: Chef Stacy Caudill and Chef Adam Mika joined us. The Culinary Program is getting upgraded equipment. The Chefs do not need offices, they can use a corner of their respective Classrooms. Classroom sizes are good. The Café/Restaurant concept should be visible and enhanced, but adaptable so that the Lobby can be fully used for assemblies.
22. After discussion, a plan will be developed that positions a new Culinary classroom at the rear of the former Meat Cutting Lab, which allows additional lab space toward the fronts of both existing Culinary and Bakery Labs. The former front portion of the Meat Cutting Lab can be utilized for a retail Bakery sales area that is accessed from the Café.
23. School Administrative Offices: Mr. Rice agreed the office suite could be adapted so that Conference Room A could be merged into an office. One office (Principal) would be larger than the other to accommodate parent conferences.



SUMMARY OF MEETING NO. 13

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and Mon Valley School Facilities Plan

Project No. #4167

Date: June 14, 2021 email from Robin White

Purpose of Meeting: Industry Advisory Committee Minutes/Comments on: Medical Professions, Welding and Cosmetology

In Attendance: Steel Center CTE

Ms. Robin White, Assistant Director/Principal
412.469.3200 x6745 rwhite@steelcentertech.com
Industry Partners
Mrs. Tanya Busch, Medical Professions Instructor
tbusch@steelcentertech.com
Mr. S. Tarnow Welding Instructor
starnow@steelcentertech.com
Mrs. Sandee Knight, Cosmetology Instructor
sknight@steelcentertech.com

Medical Professions/Phlebotomy

1. This is a new program for 2021-2022.
2. Mrs. Busch stated that the classroom may not be big enough with 5 day per week, in-person instruction. Mrs. Busch would like to expand it by extending the spaces into the office behind her room. The Committee endorsed this idea.
3. Pharmaceutical Tech instruction needs spaces with cabinets and a countertop with sink.
4. Changing rooms are needed for twenty-five (25) girls and six (6) boys for each AM and PM session (total of 50 girls and 12 boys lockers). A restroom is not needed within the space.
5. Five (5) Pharmacy exam rooms, five (5) patient beds and a small storage room are needed in the program space.

Welding

1. Committee wants welding booth lighting to be updated to LED. Fixture should be moved to the side walls for safety.
2. A drop down hose and hood in each booth (total of 24) would create cleaner air around the welder by removing welding fumes closer to the source of production. This would better meet OSHA standards.
3. New welding curtains (slatted type for better coverage across opening). This also affords better protection against arc flashing to others in area who are not welding.
4. Construct an outside welding booth. This would also students to have a different welding experience by dealing with the weather elements.

Cosmetology

1. The space is small for the amount of equipment located within.
2. Equipment is outdated. New stations are being studied by the Committee. Suggestion was made to add a stand behind the sinks to the back bar. Also, add a barber chair, micro-dermabrasion machine, processing lights and new manicure tables.
3. More natural light is desired, and more windows added in student salon area.
4. Two-tier lockers, with 50 in each tier, are preferred in the men's and women's locker room for the AM and PM sessions. Less lockers can be provided in the men's locker room.
5. The Spa/Salon should be located in a more visible location near the Lobby. Possible location is in Conference Room A.



SUMMARY OF MEETING NO. 14

40 SHENANGO AVENUE, SHARON, PA 16146
Phone (724) 981-8820 Fax (724) 981-4515

130 7th STREET, SUITE 830, PITTSBURGH, PA 15222
Phone (412) 281-2280 Fax (412) 281-2334

Project: Steel Center for Career and Technical Education and
Mon Valley School Facilities Plan

Project No. #4167

Date: May 19, 2021 at 7:00 pm

Purpose of Meeting: Diesel Technology
Industry Advisory Committee

In Attendance:
Steel Center CTE

Mr. Kevin Rice, Administrative Director
Taylor Heasley, Industry Partner
Will _____, Industry Partner
Other Industry Partners not listed
Mr. Robert Burgy, Diesel Instructor
rburgy@steelcentertech.com

1. Mr. Rice has suggested eliminating the annex from Diesel, and then adding on to the outside of the building towards the walkway and giving Diesel a larger area that way. If it works out that way, the benefit would be that 1 garage instead of 2 would be very beneficial to the program. He referred to a sketch he drafted.
2. The Industry Partners pointed out that Automotive utilizes twice as much space/area as Diesel with half the size vehicles. Diesel was not designed to be in the area it is currently located.
3. Mr. Burgy stated that with the space provided, we feel that it would be better to only use 1 garage door at the far end of the building, while also blocking up one of the 2 that is already in use in the main garage. This way the vehicles, especially long term vehicles, can park at an angle towards the rear of the shop (many newer facilities are set up this way). This leaves the front of the shop with all kinds of space for equipment and quick repair jobs.
4. Mr. Burgy stated that more bays for trucks means more hoists. Two (2) total hoists for our shop is not enough. We need to consider at the minimum of 1 more of each type of lift than we already have. That would give us 2 heavy lifts and 2 medium hoists. There is a lot less waste of time with a hoist. Plus, these are used in every shop out there. Very few shops continue to work on the floor with jack stands.
5. Mr. Burgy stated two sets of equipment needs. First, hydraulic hose tools, as trucks have so many hoses on them that businesses are all buying these tools to save money. It is very important for students to be able to use them. Along with the hydraulic hose tools, we also discussed the use of an EATON hydraulic trainer. Hydraulics is such an important part of the truck business and the trainers are able to take a large chunk of that hands-on teaching and put it in a very small area to utilize the lack of space even more.

