Scope Determination Report:
CTE Improvements

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Introduction

This report outlines the scope of work for the CTE Improvement project at Swenson Arts & Technology High School. Swenson’s mission is to “prepare our diverse student population for careers, apprenticeships, and postsecondary studies by offering challenging academic and career programs in a safe supportive learning environment.” The school serves 9th through 12th grade students. The current enrollment is 630 students.

Swenson is located at 2750 Red Lion Road of Northeast Philadelphia. The school is largely surrounded by industrial facilities. The main entrance faces Northeast and is located off of Red Lion Road. The site is bound by a small wooded area and car dealership to the Northwest, a parking lot serving a warehouse to the Southwest, and GF Congdon Pkwy and Orleans Technical College to the Southeast.

Swenson was constructed in 1976 as a skills center and purchased in 1990 by the School District. The building consists of a one-story block and a two-story block totaling 172,000 square feet. The building is concrete- and steel-framed with a brick masonry façade.

Career & Technical Education (CTE) Programs of Study (POS) provide students with the technical skills, knowledge, and training necessary to succeed in specific occupations and careers while also preparing for postsecondary educational options. Programs of Study are comprised of sequential academic and technical courses that develop the skills necessary to obtain and succeed in the high-priority fields of today’s occupational market. Successful completion of a POS includes: 1080 hours of career and technical instruction in the chosen field(s); an end-of-program assessment, and; attainment of industry-recognized certifications in the chosen field(s).

In addition to academic and elective courses, Swenson offers CTE programs in eleven areas including Allied Health, Auto Collision, Auto Mechanics, Baking, Carpentry, Computer Networking, Culinary, Digital Media Arts, Electrical, Engineering, and Plumbing. The main purpose of the renovation is to provide upgraded theory classrooms and labs for the Digital Media and Engineering programs on the second floor.
Context Maps

Overall Map

Aerial View of Site
Scope of Work

Proposed scope is outlined below. Scope is to be finalized by SDP and Design Consultant during the Schematic Design Phase. See Appendix A for floor plans, Appendix B for photographs of existing conditions, and Appendix C for Ideal Technology Requirements.

The design consultant is responsible for verifying and documenting all existing conditions and confirming all scope. The design consultant shall take extra care to survey and accurately document all existing conditions and provide appropriate, cost-effective design solutions that support the goals of the project. The design consultant shall conduct a code analysis at the outset of the design process.

The main purpose of the renovation is to provide upgraded theory classrooms and labs for the Digital Media and Engineering Technology programs on the second floor (+/- 6,500 sf). The design consultant, in consultation with the SDP, is to determine the best location and orientation of the spaces within the area defined on the plan. The adjacent corridor will also receive improvements. The final list of equipment for each program will be developed by SDP during schematic design, including which items will be in the construction contract and which will be owner-provided.

**Theory Classrooms**

Create two theory classrooms, one serving each program. Classrooms will be designed for twenty-four students. Design should create a visual connection with corresponding labs where possible while minimizing sound intrusion from the labs. It may be desirable to modernize an existing theory classroom according to the proposed layout of rooms. Design consultant to provide a recommendation for SDP to review.

Requirements for the classrooms include:

- Area: 800 sf (minimum)
- New walls: Painted GWB (abuse-resistant)
- Existing walls: Repair and remove obsolete equipment. Paint.
- Provide new VCT floor.
- Provide new ACT ceiling.
- Provide new solid wood door with narrow lite in existing or new frame.
- Provide new LED light fixtures.
- Provide new exit signs.
- Provide power and data receptacles according to Ideal Technology Scenario; design consultant to confirm capacity of existing infrastructure.
- Relocate/provide new clock, speaker, phone as necessary.
- Relocate/provide new fire alarm notification devices as necessary.
- Provide 12'-0" of PLAM countertop.
- Provide the following equipment: Interactive Panel Board (Board to be provided by SDP; blocking and power/data to be included in scope), markerboard (16'-0" min.), tackboard (12'-0" min.).
- Restructure HVAC terminal equipment as necessary to serve new/refurbished space. (Classrooms are currently served by supply air and return air troffers at the light fixtures.)

**Digital Media Lab**

Provide a Digital Media Lab for twenty-four students, approximately 2,600 sf. The Lab shall include an A/V recording studio with control room (+/- 900 sf), editing room (+/- 1,500 sf), secure storage space (+/- 200 sf), and small breakout studios where space permits. The final list of equipment will be developed by SDP during schematic design. Design should minimize sound intrusion between spaces while creating visual connection where appropriate. It is preferable to organize the
rooms as a suite with an entry vestibule and adjacency to the theory classroom if space permits. Design should incorporate a contemporary, visually interesting interior finish scheme.

Requirements for the Lab include:
- Area: As described above.
- New walls: Painted GWB (abuse-resistant)
- Existing walls: Repair and remove obsolete equipment. Paint.
- Provide new VCT floor everywhere except provide carpet tiles at A/V recording studio.
- Provide new ACT ceiling.
- Provide large-scale signage designating entry to Lab.
- Provide new solid wood doors with narrow lite in existing or new frame.
- Provide new LED light fixtures.
- Provide new exit signs.
- Provide power and data receptacles in sufficient quantities and locations to serve equipment including computers, recording and editing equipment; design consultant to confirm capacity of existing infrastructure.
- Relocate/provide new clock, speaker, phone as necessary. All workspaces to receive each item.
- Relocate/provide new fire alarm notification devices as necessary.
- Provide built-in teacher workstation with PLAM countertop and base cabinets.
- Provide the following equipment:
  - A/V recording studio – three curtains on three tracks (green, black and white).
  - Editing room - Interactive Panel Board (Board to be provided by SDP; blocking and power/data to be included in scope), markerboard (16'-0” min.), tackboard (12'-0” min.).
- Restructure HVAC terminal equipment as necessary to serve new/refurbished space. (Classrooms are currently served by supply air and return air troffers at the light fixtures.)

**Engineering Lab**

Provide an Engineering Lab for twenty-four students, approximately 2,600 sf. The Lab shall include spaces to accommodate equipment typical of a wood shop, machine shop, robotics lab and fab lab. The final list of equipment will be developed by SDP during schematic design. Approximately 200 sf of storage should be provided as well. The design consultant shall recommend a division of work spaces for SDP to review once the equipment list is finalized. Design should minimize sound intrusion between spaces while creating visual connection where appropriate. It is preferable to organize the rooms as a suite with an entry vestibule and adjacency to the theory classroom if space permits. Design should incorporate a contemporary, visually interesting interior finish scheme.

Requirements for the Lab include:
- Area: As described above.
- New walls: Painted GWB (abuse-resistant)
- Existing walls: Repair and remove obsolete equipment. Paint.
- Provide new VCT floor.
- Provide new ACT ceiling.
- Provide large-scale signage designating entry to Lab.
- Provide new solid wood doors with narrow lite in existing or new frame.
- Provide new LED light fixtures.
- Provide new exit signs.
- Provide power and data receptacles in sufficient quantities and locations to serve equipment; design consultant to confirm capacity of existing infrastructure.
- Relocate/provide new clock, speaker, phone as necessary. All workspaces to receive each item.
- Relocate/provide new fire alarm notification devices as necessary.
- Provide built-in teacher workstation with PLAM countertop and base cabinets. Provide quantity of countertop sufficient to support small equipment.
- Provide the following equipment:
  - Interactive Panel Board (Board to be provided by SDP; blocking and power/data to be included in scope), markerboard (16'-0" min.), tackboard (12'-0" min.).
- Restructure HVAC terminal equipment as necessary to serve new/refurbished space. (Classrooms are currently served by supply air and return air troffers at the light fixtures.)

**Corridor**

- Existing walls: Repair and remove obsolete equipment. Paint, including columns.
- Provide new VCT floor.
- Provide new ACT ceiling.
- Provide new LED light fixtures.
- Provide new exit signs.
- Provide new ceiling registers.

**Budget**

The construction budget as established is **$2,000,000.**
Appendix A – Floor Plan

Approximate Area of
Digital Media Lab and Engineering Lab
Renovations at Second Floor
(+/- 9,000 sf)
Appendix B – Existing Conditions

Digital Media Lab
Engineering Lab
Appendix C – Ideal Technology Requirements

IDEAL TECHNOLOGY SCENARIO
STANDARD CLASSROOM INFRASTRUCTURE LAYOUT

TOTAL DROP COUNT:
14 (WITH IWB)
13 (WITHOUT IWB)

TOTAL OUTLETS:
5 QUADS
1 DUPLEX

KEY:
1. DUPLEX ELECTRICAL OUTLET
2. QUAD ELECTRICAL OUTLET
AMOUNT OF DATA DROPS

NOTES:
DRAWINGS NOT TO SCALE,
INDIVIDUAL CLASSROOMS WILL VARY BY SHAPE AND LOCATION OF WINDOWS & DOORS, BUT COUNTS AND TYPES OF INFRASTRUCTURE TO REMAIN THE SAME.