

SECTION 01 01 00
SUMMARY OF WORK
ADD#2 Revisions

PART 1 – GENERAL

1.1 STIPULATIONS

- A. The specifications sections "General Conditions of the Construction Contract", "Special Conditions", and "Division 1 - General Requirements" form a part of this Section by this reference thereto, and shall have the same force and effect as if printed herewith in full.

1.2 LOCATION

- A. Loysville Youth Development Center • 10 Opportunity Drive, Loysville, PA 17047 • Tyrone Township • Perry County • Pennsylvania

1.3 PROJECT DESCRIPTION

- A. See Attached Exhibit-A Scope of Work

1.4 CONTRACT DURATION

- A. The Construction Contract duration shall be 426 calendar days commencing on the date of the Initial Job Conference.

1.5 WORK INCLUDED

- A. The Work of this Project consists of, but is not necessarily limited to, the following. Detailed requirements of the Work are described in the pertinent specification Sections and/or shown on the Drawings.
- B. The Client Agency has first right of refusal for demolished items before the Contractor disposes of them.
- C. General Construction and Site Work (.1) Contract:
 - 1. See Exhibit-A (Scope of Work) at the end of this specification.
- D. HVAC Construction (.2) Contract:
 - 1. See Exhibit-A (Scope of Work) at the end of this specification.
- E. Plumbing Construction (.3) Contract:
 - 1. See Exhibit-A (Scope of Work) at the end of this specification.
- F. Electrical Construction (.4) Contract:
 - 1. See Exhibit-A (Scope of Work) at the end of this specification.

1.6 SPECIFICATION FORMAT

- A. The Specifications for the work of the separate prime Contracts are bound in one volume. Technical provisions which apply to each prime Contract are included in the Divisions listed below:

- B. General Construction (.1) Contract: Divisions 01 through 14 and Divisions 31, 32 and applicable Sections of Division 33
- C. HVAC Construction (.2) Contract: Divisions 01, 23 and applicable Sections of Divisions 02, 03, 05, 07, 09, 25, 31, 32 and 33.
- D. Plumbing and Fire Protection Construction (.3) Contract: Divisions 01, 21, 22 and applicable Sections of Divisions 02, 03, 05, 07, 09, 25, 31, 32 and 33.
- E. Electrical Construction (.4) Contract: Divisions 01, 25, 26 and applicable Sections of 02, 03, 07, 08, 31, 32, and 33.

1.7 WORK BY OTHERS

- A. Demolition:
 - 1. Removal of existing AC units.
- B. New Appliances:
 - 1. Refrigerator, microwave, coffee maker (Staff Break Room)
 - 2. Dorm-style refrigerator/microwave (ICR Observation Room)
 - 3. Washer & Dryer (Laundry)
- C. Workstations:
 - 1. Movable staff workstation: wheeled chair and wheeled cart
 - 2. Staff workstation: desk, chair, and computer, phone (+ radio charging station at Staff Break Room)
- D. New Furniture:
 - 1. Resident beds and open chests (Resident Bedrooms)
 - 2. Molded plastic portable cot (ICR)
 - 3. Folding table (Laundry)
 - 4. Lockable cabinet for laundry supplies (Laundry)
 - 5. (4) Resident desks at Timeout Room #115
 - 6. All other furniture not mentioned above
- E. All Electronics:
 - 1. TVs, wall-mounted
 - 2. Computers, used by Residents
 - 3. Computers, used by Staff
 - 4. Phones
- F. Miscellaneous:
 - 1. Wall-mounted Adjustable shelving in Staff Office #212
 - 2. Window treatments
 - 3. Chemical Dispenser at Janitor #007
 - 4. Dry erase boards
 - 5. Pool table, ping pong table, TVs, video game consoles, furniture, etc. in Reward Room #116
 - 6. Paper Towel Dispenser
 - 7. Toilet Tissue Dispenser

1.8 QUESTIONS DURING BIDDING PERIOD

- A. Direct all questions pertaining to the Project to the Project Professional utilizing the e-Builder Enterprise Software Program (e-Builder) as described in the Instructions To Bidders.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

**END OF SECTION
EXHIBIT-A**

SCOPE OF WORK

BB-1:

01 – GENERAL AND SITE WORK-BB#1

1. SITE WORK: .01 BB-1

- a. Sanitary Sewage Piping:
 - 1) Demolish the existing sanitary sewage piping system from the street main to the interior of the building.
 - 2) Install a new sanitary sewage piping system from existing sanitary manhole/sewer main to inside building.
- b. Fire Protection Water Service:
 - 1) Connect and extend the new fire protection water service from existing water main located in the street to the building basement mechanical room.
- c. Storm Sewer - Roof Drainage:
 - 1) Furnish new building roof drainage downspout boots and extend to existing stormwater system.
- d. New climb proof mesh fence around new HVAC condensing units at rear 'L' and side of building.
- e. Provide temporary chain-link fencing around dumpsters, equipment, lay down area, staging, etc. at rear of building (location to be confirmed with Facility).

2. DEMOLITION .01 BB-1:

- a. Hazardous Materials Abatement:
 - 1) **ACMs:** No ACMs were identified in the building. No action needed at this time.
 - 2) **LBP:** Exterior white paint on windowpanes and wood building components contains LBP. Abate exterior wood trim that is to be removed. Exterior wood trim that is to remain (as well as replacement trim) shall be wrapped in aluminum.
 - 3) **PCBs and Mercury Material:** 54 fluorescent bulbs / ballasts and 3 thermostats shall be abated.
 - 4) **Moisture and Mold:** Moisture readings in the Basement came back "low." No mold was observed, and samples were not taken. No action needed at this time.
 - 5) **Radon:** The existing Mechanical Room in the Basement had an elevated result during original testing. However, upon the conclusion of a long-term radon test of that room, results came back below the EPA's threshold, so radon mitigation is not recommended for the building. No action needed at this time.
 - 6) See Hazardous Materials Survey dated May 2022 and Long-Term Radon Testing letter dated January 4, 2023, both by KU Resources, Inc.
- b. Rooms: Demo existing rooms. (See **existing** floor plans for room numbers.)
Basement
 - 1. Individual Care Room (#004a)
 - 2. Storage room (#006)
 - 3. Laundry (#008)
 - 4. Storage closets (#009 & #014)
 - 5. Hall (#010)
 - 6. Toilet room (#013)

First Floor

1. Restroom (#108)
2. Shower (#109)
3. Storage (#110)
4. Janitor (#111)

Second Floor

1. Restroom (#206)
2. Storage (#207)
3. Shower (#208 & #209)
4. Janitor (#213)
5. Storage (#215)
6. Toilet (#216)
7. Storage closets from Stairs (#204 & #212)

Third Floor (Attic)

1. Attic (#301)
2. Attic (#302)
3. Attic (#303)
4. Attic (#304)

c. Walls:

Basement

1. Demo wall between Electrical (#001a) and Office (#001).
2. Demo portions of Office (#012a) walls.

First Floor

- 1) Demo portion of Supervisor (#103) walls.

d. Doors: Demo all existing doors, frames, and hardware throughout building, except for (3) existing doors on the Third Floor.

e. Windows:

1. Demolish existing double-hung wood windows within future Resident Bedrooms and Padded Room on 2nd floor.
2. All existing metal security screens throughout the building shall be removed and relocated.

f. Interior Finishes: Demo existing finishes throughout building as indicated below.

Demo Basement Finishes

1. Floors:

- a. VCT throughout Basement; no existing VCT in Electrical (#001A), Mechanical (#002), Stair-A (#005), Storage (#006), and Stair-C (#015)
- b. Paint on concrete floor in Stair-A (#005) and Stair-C (#015)

2. Base:

- a. Vinyl and/or wood wall base in Laundry (#008), Hall (#010), both sides of wall at Office (#012A), and Toilet room (#013)

3. Walls:

- a. Wood paneling in Laundry (#008), Hall (#010), Toilet room (#013), and Storage closets (#009 & #014)

4. Ceilings:

- b. ACT ceiling in Laundry (#008)
- c. Wood ceiling in Hall (#010)

Demo First Floor Finishes

1. Floors:

- a. Ceramic tile in Restroom (#108) & Shower (#109)
- b. Paint on concrete floor in Stair-A (#106), Stair-C (#113) & Enclosed Porch (#114)
- c. VCT throughout remainder of First Floor

2. Base:

- d. Rubber base in Toilet (#104) & Janitor (#111)

3. Walls:

- a. Glazed wall tile in Toilet (#104), Restroom (#108), and Shower (#109)
- b. Wallpapered paneling throughout First Floor
- c. Wood wainscot to remain
- 4. Ceilings:
 - a. ACT ceilings in Supervisor (#103), Rec Room (#112), Restroom (#108), Shower (#109), Reward Room (#105), and Cool Down (#115)

Demo Second Floor Finishes

- 1. Floors:
 - a. Ceramic tile in Restroom (#206) & Shower (#208 & #209)
 - b. VCT throughout remainder of Second Floor
 - c. Paint on concrete floor in Stair-A (#203) and Stair-C (#211)
- 2. Base:
 - d. Rubber base throughout Second Floor
- 3. Walls:
 - a. Glazed wall tile in Restroom (#206) & Shower (#208 & #209)
 - b. Wallpapered paneling throughout Second Floor
 - c. Plywood in Storage (#207)
- 4. Ceilings:
 - a. ACT ceilings in Restroom (#206), Shower (#208), and Toilet (#216)
- g. Miscellaneous: Demo existing miscellaneous items:
 - 1. Washer, dryer, and sink/cabinets in Laundry (#008)
 - 2. Cabinetry in Toilet (#216)
 - 3. All metal handrails at exterior stairs.
 - 4. Wood handrail cap at Stair-B and steel handrail cap at Stair-A & Stair-C.
 - 5. The existing batt and blown-in insulation located on the Attic floor deck shall be removed and properly disposed of in order to allow for the installation of the new MEP components under this contract.

3. RENOVATIONS: .01 BB-1

- a. Rooms:
 - Basement Renovations**
 - 1) Electrical: Move Electric room wall to increase width of room.
 - First Floor Renovations**
 - 2) ICR Suite (former Supervisor): Remove portion of wall to accommodate new ICR layout
 - c. Sound isolation throughout, especially on ceiling
 - d. Individual Care Room: Safety padding all walls, hard ceiling, seamless floor, secured door with shatter-resistant observation window, magnetic hold-open on door, continuous hinge, no door handle on inside of room
 - e. Observation Room:
 - 42" wide door with continuous hinge
 - Window into ICR
 - f. Single-Occupant Resident Toilet Room:
 - Anti-ligature fixtures, hard-wired motion sensors, water closet, lavatory
 - Anti-ligature privacy door.
 - 3) Staff Break Room (former Cool Down)
 - a. Base cabinets, wall cabinets, plastic laminate countertop
 - b. Refrigerator (full size), microwave, coffee maker, sink. Appliances provided & installed by Client Agency.
 - c. Staff mailboxes with sloped top (anti-ligature)
 - d. Replace the window into Rec Room with one-way visibility glazing.
 - e. Anti-ligature coat hooks
 - 4) Recreation Room
 - a. Anti-ligature coat hooks (relocate to Enclosed Room #101)
 - b. Full dome observation mirror
 - 5) Reward Room

- a. Full dome observation mirror

Second Floor Renovations

- 1) Supervisor Office (former Office)
- 2) Staff Office (former Office)
- 3) Staff Restroom (former Toilet)
 - a. New door opening; infill existing door opening

4. NEW CONSTRUCTION: .01 BB-1

a. Rooms:

Basement - New Construction

- 1) (4) Mechanical Rooms #002, #005, #014a, and #018
- 2) (2) Counselor Offices #003 & #004
- 3) Staff Restroom #006
- 4) Janitor Closet #007
- 5) Chase #008
- 6) Resident Restroom #011
- 7) I.T. Room #012

First Floor - New Construction

- 1) Storage #102
- 2) Resident Restroom #104: Anti-ligature privacy door
- 3) Laundry #105
- 4) Janitor #106: Wall-mounted adjustable shelving with solid metal shelves (galvanized)
- 5) Staff Restroom #109
- 6) Timeout Room #115: Sound isolation

Second Floor – New Construction

- 1) Storage Room #202: Adjustable wall-hung shelving with plastic laminate shelves
- 2) Storage Closet #208: Adjustable wall-hung shelving with wire shelves
- 3) Resident Shower Room #209: (3) showers with floor-to-ceiling walls in between, small shelf in each shower for bar soap and washcloth, anti-ligature towel hooks outside showers for bath towels, anti-ligature privacy door
- 4) Janitor Closet #210: Adjustable wall-hung shelving with solid steel shelves
- 5) Chase #211
- 6) Resident RR #215
- 7) Resident Bedrooms (7):
 - a. One exterior window with relocated security screen on interior
 - b. Quarter dome anti-ligature mirror opposite door
 - c. Observation window in door, with shatter-resistant glazing, doors to swing out 180° against wall

a. Walls: (New Construction)

- 1) New 3-5/8" or 6" heavy gauge metal studs as shown on drawings.
- 2) Sound attenuation batts at Counselor Offices, Supervisor Offices, Timeout Room, ICR Suite, Padded Room, and Resident Bedrooms.
- 3) Abuse-resistant (AR) gypsum board throughout; except very high impact gypsum board where barrier mesh is used (at Resident Bedrooms, ICR Suite, and Timeout Room). AR gypsum board shall be abuse & impact resistant.

b. Doors: (New Construction)

- 1) New metal doors, frames, and hardware throughout building, except for (3) existing doors on the Third Floor.
- 2) Exterior doors to be insulated metal w/thermal break frames; interior doors to be hollow metal with metal frames.
- 3) Hardware to be anti-ligature.
- 4) Kick plates on Janitor rooms and high traffic doors only.
- 5) Exterior doors & doors with panic hardware to have maglocks, fail safe (fail open)
- 6) Padded Room and Resident Bedroom doors:

- a. Observation windows in doors, with shatter-resistant glazing and tamper-proof hardware
 - b. Continuous hinges
 - c. No handle on inside of door of 1st Floor.
- c. Windows: (New Construction)
- Windows within future Resident Bedrooms and Padded Room on 2nd Floor only:**
- 1) Infill windows (where indicated on drawings) with a contrasting brick that is recessed in the opening.
 - 2) Replace remaining Resident Bedroom and Padded Room windows with commercial grade, single-hung, aluminum windows with tempered Low-E insulated glazing. Windows shall include automatic sill locks, heavy duty spring balances, jamb inserts to limit sash travel to 4", muntin's & half insect screens when operable. Work shall include repair of deteriorated window openings and installation of new wood interior window trim, PVC apron (Resident Bedrooms only), sealants, and painting.
 - 3) New window glazing shall be tempered & laminated.
- Security Screens throughout building:**
- 1) Relocate existing security screens to inside and outside of windows (where indicated on drawings).
- d. Interior Finishes: (New Construction)
- 1) Floors: Seamless floors throughout the building.
 - 2) Base: Integrated base at seamless floors, except walls with wood wainscot will have wood base and walls with ceramic tile will have ceramic tile base.
 - 3) Walls:

Basement:

 - a. Exterior walls remain as is. Scrape at water-damaged locations. Paint.
 - b. Existing brick walls remain as is.
 - c. Ceramic tile walls at Staff RR and Resident RR.
 - d. Fiberglass Reinforced Plastic (FRP) on walls at Janitor.
 - e. The remainder of the new walls shall have abuse-resistant gypsum board and paint.

First Floor:

 - a. Existing wood wainscot and window casing to remain as is, refinish, add new 1x6 wood base.
 - b. New abuse-resistant gypsum board above existing wainscot, paint.
 - c. The new walls shall have new wood wainscot (match existing) with abuse-resistant gypsum board above, paint.
 - d. Ceramic tile walls at Resident RR, Staff RR, and ICR RR.
 - e. Sound insulation at Timeout Room & ICR.
 - f. OSB sheathing at Padded Room; padding on walls.

Second Floor:

 - a. New abuse-resistant gypsum board all new walls, paint. Very high impact gypsum board at Resident Bedroom walls, paint.
 - b. Sound insulation at Resident Bedrooms.
 - c. Barrier (security) mesh at all Resident Bedrooms.
 - d. Ceramic walls at Resident Shower Room (including showers themselves), Staff RR, and Resident RR.
 - e. Fiberglass Reinforced Plastic (FRP) on walls at Janitor.
- e. Ceilings: (New Construction)
- 1) Paint all exposed existing hard ceilings throughout building.
 - 2) New suspended acoustical ceilings (including standard hold-down clips) at:
 - Basement: Counselor Office #1 #003, Counselor Office #2 #004, IT Room #012
 - 3) New suspended gypsum board ceiling at Staff RR #006 & Resident RR #011.
- f. Miscellaneous: (New Construction)
- 1) Toilet room accessories shall be anti-ligature and vandal resistant.

- 2) Corner observation mirrors in Resident Bedrooms (opposite door) and all common areas where direct line-of-sight is hindered. Full dome observation mirrors at Open Area (B), Rec Room (1st), Reward Room (1st), and Multipurpose Room (2nd).
- 3) New toilet partitions. Tamper resistant hardware and vandal resistant.
- 4) Anti-ligature privacy doors at Resident RR on 1st floor, restroom of ICR suite on 1st floor, shower stalls on 2nd floor.
- 5) Fire extinguishers: (as located on Drawings)
 - a. Corridors: Locate near exit doors, in fully recessed fire rated cabinets, locked.
 - b. Mechanical Rooms: Surface mount with brackets.
 - c. Other Rooms: In fully recessed cabinets, locked.
- 6) Access panels in gypsum board ceilings for MEP access. Tamper resistant hardware.
- 7) New metal guards and handrails (both painted) at all exterior stairs.
- 8) Provide corner guards where indicated on the Drawings.

02 – HVAC-BB#1

1. GENERAL: .02 BB-1

- a. Utilize existing campus steam heat source in new building heating system design. The existing steam line entrance into building to remain.
- b. New heating, ventilation, air conditioning, and exhaust systems.
- c. New automatic temperature controls (ATC). Control of new HVAC & exhaust fan systems. Lockable vandal proof cover.
- d. Supply and return grilles to be security, anti-ligature rated throughout building.

2. DEMOLITION: .02 BB-1

- a. Demolish existing recessed steam wall radiators. Reuse cubbies.
- b. Central Vacuum System

3. NEW CONSTRUCTION.02 BB-1:

- a. New hot water perimeter heating in rooms such as the Reward Room and Rec Room. System shall be concealed and not directly accessible to Residents.
- b. New Steam to Hot water system including (2) shell and tube heat exchangers, associated pumps, and controls.
- c. New combination of dedicated outdoor-air system (DOAS), air handling units, and multi-zone heat pump system.
 - 1) Condensing units outside on ground behind building in "L." Enclosed with mesh fencing. Piping runs on exterior of building; enclosed to protect pipes.
 - 2) Multi-Zone Heat Pump systems to serve the basement areas.
 - 3) Air handling units (AHUs):
 - a. AHU-1 and AHU-2 stacked in Mech Room #4 (#018); AHU-1 serves first floor Reward Room (#116), and AHU-2 serves rest of first floor north wing.
 - b. AHU-3 in Mech Room #2 (#005); serves first floor center core.
 - c. AHU-4 in Mech Room #1 (#002); serves Rec Room (#103).
 - d. AHU-5 in north wing of Attic; serves Resident Bedrooms #9-#12 and adjacent Corridor.
 - e. AHU-6 in north wing of Attic; serves Resident Bedrooms #6-#8, Padded Room 117, and adjacent Corridor.
 - f. AHU-7 in center core of third floor; serves second floor center core.
 - g. AHU-8 in west wing of Attic; serves Multi-Purpose Room
 - h. AHU-9 in west wing of Attic; serves Multi-Purpose Room
 - i. AHU-14 serves IT room (#012 Basement)
 - 4) (2) DOAS units in attic (no exhaust heat recovery). Unit #1 serves north wing. Unit #2 serves the center and west wing.
- d. (5) New exhaust fans to serve Toilet Rooms, Shower Rooms, Janitor Closets and Mechanical Space.
- e. (1) New fan (with thermostat) in Enclosed Porch to provide air movement when temperatures are high.

- f. (1) New exhaust fan in Staff Break Room, on a timer.
- g. New hot water unit heaters to serve stairwells and attic mechanical spaces.
- h. Furnish the domestic water service meter with remote readout and install associated BAS system wiring. The meter shall be installed by the .3 Contractor.

03 – PLUMBING AND FIRE PROTECTION-BB#1

1. WATER HEATERS: .03 BB-1

- a. Demolish (2) existing electric water storage heaters located in the Basement.
- b. Furnish and install (2) new 200-gallon electric water heaters in Basement Mech Room #3.

2. WATER PIPING: .03 BB-1

- a. A new 2" water line into the building was recently replaced as part of the existing campus water distribution system replacement project to remain. The existing building domestic water distribution system to be removed and replaced with new.
- b. New domestic water distribution piping system within the building with new backflow preventer and meter assembly at service entrance.
- c. A duplex water pressure booster system will be furnished and install to increase and maintain the buildings water supply pressure to ensure adequate system pressure is available to operate flush valves and fixtures, especially the plumbing fixtures located on the second floor.
- d. The domestic water distribution system shall be type L copper with required shut-off valves and fittings. The piping system shall be insulated and concealed above ceilings, in walls or in designated pipe chases in occupied spaces.

3. SANITARY, WASTE AND VENT PIPING: .03 BB-1

- a. Demolish existing sanitary, waste and vent piping system within building.
- b. New sanitary, waste and vent piping system within the building. The piping system shall be schedule 40 cast iron, no-hub, pipe, and fittings concealed above ceilings, in walls or in designated pipe chases in occupied spaces.

4. NEW PLUMBING CONSTRUCTION: .03 BB-1

- a. Plumbing fixtures: Water efficient, tamper-resistant, anti-ligature, hard-wired sensor operated flush valves and faucets.
- b. Water Cooler assembly with bottle filler, located on basement, first and second floors.
- c. Lavatory fixtures are tamper and ligature-resistant, reinforced molded cast polymer solid surface assembly with hard-wired sensor operated faucets. The water and waste rough-in piping and associated sensor faucet assembly located below the lavatory will be concealed with secure tamper-resistant covering.
- d. Clothes washer & dryer hook-ups
- e. Mop Sinks (with flexible hose) in Janitor closets/rooms, 3 total
- f. Water closets to be floor mounted, back flush, concealed flush-valve, porcelain, anti-ligature, with permanently attached split-nose toilet seats.
- g. Single bowl sink in Staff Break Room.
- h. ICR RR: (1) water closet & (1) lavatory
- i. Single-user Staff and Resident RRs: (1) water closet, (1) urinal, (1) lavatory
- j. Resident Bathroom & Shower Room (2nd Floor): (3) Showers, (2) Water closets, (1) Urinal, (3) Lavatories
- k. Recessed locking cabinet located in the Corridor wall for staff master shut-off of showers. Labeled ball type shut-off valves for each individual shower as well as one master valve to shut off all 3 showers at once. A master thermostatic mixing valve assembly is furnished to adjust and set the tempered water supply temperature to the showers.
- l. Floor drain in each shower stall, restrooms, laundry, janitor closets/rooms, and Basement Mechanical Rooms. A linear drain 3" x 60" will be located outside shower stalls. Locate a new floor drain with funnel at the third floor for the attic dry sprinkler system.
- m. A reduced pressure type backflow preventer and water meter with remote readout monitoring will be installed on the domestic water service entering the facility. The water meter will be furnished by the .2 Contractor, installed by the .3 Contractor. All remote monitoring wiring by .2 Contractor.

- n. A duplex domestic water pressure booster pump assembly - located in basement mechanical equipment will boost the domestic water supply pressure to adequately supply the flush valves and plumbing fixtures to ensure proper operation.
- o. Piping in Basement to be exposed, insulated, and painted as required.

5. SPRINKLER SYSTEM: .03 BB-1

- a. Existing building has limited area sprinklers in basement mechanical rooms that shall be removed.
- b. Under a recent project, a new campus fire water distribution line and fire hydrants were installed from the campus water distribution system. A new fire protection water service will be connected and extended to the building.
- c. New double detector check valve assembly with supervised valves will be installed at the fire service entrance in basement mechanical room.
- d. An exterior fire department connection will be provided from the building fire sprinkler system.
- e. New NFPA 13 automatic sprinkler system throughout building. Sprinkler heads accessible to residents shall be concealed, tamper- vandal- and ligature-resistant institutional sprinklers.
- f. Sprinkler riser located in Stair-B. No standpipe and fire department valves required. Third floor - Attic is unoccupied.
- g. A dry fire sprinkler system will be furnished and installed for the third-floor storage area and attic spaces.
- h. Schedule 40 black steel for wet system and schedule 40 galvanized steel for dry system.
- i. Fire pump – Will require a vertical in-line fire pump and jockey pump with associated controller panel. Estimated pump sizes 25-hp / 1-hp.

04 – ELECTRICAL-BB#1

1. DEMOLITION: .04 BB-1

- a. Demolish existing panels, electrical devices, and wiring within the building.

2. RENOVATIONS: .04 BB-1

- a. Replace electrical system including feeders and step down transformer external to the building, distribution panelboard, branch circuit panelboards, and associated electrical feeders.
- b. Provide electronic locking for building by modifying or expanding existing Securetron System. Exterior and resident secured interior spaces shall have electric strike locking mechanisms on primary egress from those spaces.

3. NEW CONSTRUCTION: .04 BB-1

- a. Control panel in 2nd floor Staff Office to control:
 - 1) Each bedroom door lock individually
 - 2) All bedroom door locks at once
 - 3) Each bedroom lighting fixture individually
 - 4) All bedroom lighting fixtures at once
 - 5) All screws shall be security type.

4. POWER: .04 BB-1

- a. The increased mechanical air conditioning load, electric hot water and fire pump loads will require the building electrical service to increase to a 600 Amp, 208/120V-3 Phase-4 Wire. The existing Transformer 'T4' 150KVA 12.47KV:208/120V - 600A service in Building 15 and 250KW 208/120V-3 Phase-4 Wire Generator in Building 42 will not have the capacity to be used to serve the new electrical service at Building 21. A new separate 150KVA 12.47KV:208/120V transformer and 125KW 208/120V generator will need to be provided for the new electrical service at Building 21. The new 150KVA 12.47KV:208/120V transformer primary electrical service will need to be connected from the existing campus 12.47KV distribution. Attached is the Electrical Load Calculation with the anticipated new electrical loads.
- b. The campus meters the 12.47LV electrical service.

- c. Power for resident spaces shall be controlled from nearby staff locations on 1st & 2nd floors. This will run through a relay system, located on the 1st and 2nd floor. Final location to be determined.
 - d. Electrical outlets, fixtures, and other devices located in resident bedrooms and common areas shall be vandal/tamper resistant approved for correctional use. Anti-ligature devices.
 - e. Provide numerous receptacles in the Reward Room.
5. **LIGHTING: .04 BB-1**
- a. New LED lighting fixtures; anti-ligature (except for Mechanical Rooms & Third Floor)
 - b. Occupancy sensors & key-operated switches throughout (except Staff Rooms)
 - c. Select lighting fixtures to have battery back-up.
 - d. Padded room of ICR suite to have a dimmable light for sleeping, switch within Observation Room away from padded room door.
 - e. Resident bedrooms shall have a ceiling light, night light, and alarm call switch; all controlled at designated staff location noted on security drawings.
6. **FIRE ALARM SYSTEM: .04 BB-1**
- a. New fire alarm system. Existing system is interconnected between all the buildings on campus.
 - b. Resident Bedroom and exit doors to be integrated into the fire alarm system so that they automatically release upon system activation.
7. **SECURITY: .04 BB-1**
- a. Pelco is one of 5 requested proprietary products.
 - b. Reuse existing cameras. Specify new cameras to match existing.
 - c. Include cameras in all rooms except bathrooms and bedrooms. Include exterior cameras at rear of building.
 - d. Existing camera rack to be reused; relocate to IT Room.
 - e. Keep existing fiber entrance into building.
 - f. Update software.
 - g. All new CAT 6 cable for security cameras.
 - h. Existing alarm panel on second floor of Stair-B to remain.
 - i. Existing exterior cameras to remain active during construction.
 - j. Alert button on inside of Resident Bedrooms, indicator light on outside, with buzzer to alert Staff that a Resident needs something.
 - k. Electrified Hardware for Resident bedrooms to release doors on fire alarm.
8. **TELECOM: .04 BB-1**
- a. Use CAT 6 wiring.
 - b. Data drops located for Mechanical Equipment
 - c. Data Drops for staff desk locations
 - d. Phone Drop located in the following areas:
 - 1) Timeout Room
 - 2) ICR
 - 3) Staff Break Room
 - 4) Supervisor Office
 - 5) Staff Office

BB-2:

01 – GENERAL AND SITE WORK-BB#2

1. DEMOLITION: .01 BB-2

a. Windows:

- 1) Demolish all existing double-hung wood windows throughout the building, except for those included under BB-1 (Resident Bedrooms and Padded Room on 2nd floor).

2. **NEW CONSTRUCTION: .01 BB-2**

a. Windows: (New Construction)

All windows (excluding those within future Resident Bedrooms and Padded Room on 2nd Floor):

- 1) Infill windows (where indicated on drawings) with a contrasting brick that is recessed in the opening.
- 2) New glass block at all Stair Tower windows.
- 3) Replace remaining windows with commercial grade, single-hung, aluminum windows with tempered Low-E insulated glazing. Windows shall include automatic sill locks, heavy duty spring balances, jamb inserts to limit sash travel to 4", muntin's & half insect screens when operable. Work shall include repair of deteriorated window openings and installation of new wood interior window trim, sealants, and painting.
- 4) Obscure glass in Resident Restrooms, Resident Bathrooms, and Resident Shower Rooms. Each room shall have at least one (1) operable window with 4-inch sash opening.

The following only applies to Corridor #015, Counselor Office #3 #016, and Supervisor Office #017 in the Basement:

a. Rooms: (See A100)

- 1) Corridor #015
- 2) Counselor Office #3 #016
- 3) Supervisor Office #017

b. Walls: (New Construction)

- 1) New 3-5/8" heavy gauge metal studs as shown on drawings.
- 2) Sound insulation at Counselor Office #3 and Supervisor Office.
- 3) Abuse-resistant (AR) gypsum board throughout.

c. Doors: (New Construction)

- 1) New hollow metal doors, hollow metal frames, and anti-ligature hardware at doors: 016-1 and 017-1.

d. Interior Finishes: (New Construction)

- 1) Base: Integrated base at seamless floors
- 2) Walls:
 - Abuse- and impact-resistant gypsum board, paint.

e. Ceilings: (New Construction)

- 1) New suspended acoustical ceilings (including standard hold-down clips) at Counselor Office #3 #016 and Supervisor Office #017.

3. **Building Repair:** (as per structural report)

a. Unit Price #2: See specification-01 02 50 1.4 Schedule of Unit Prices

Exterior basement/foundation walls: Repair existing exterior basement concrete wall surfaces that are spalled, have exposed aggregate, and minor cracking. Damaged wall areas to be removed to sound concrete and restored to match the existing wall surfaces.

b. Unit Price #3: See specification-01 02 50 1.4 Schedule of Unit Prices

Exterior brick walls: Eroded joints should be raked and repointed to match existing mortar. Fungus growth and stains to be removed to restore brick surfaces.

c. Unit Price #3: See specification-01 02 50 1.4 Schedule of Unit Prices

Front porch brick piers: Eroded joints to be raked and repointed to match existing mortar.

d. Unit Price #4: See specification-01 02 50 1.4 Schedule of Unit Prices

Spalled brick to be removed and replaced to match existing brick.

e. Front porch main entry stairs: Deteriorated concrete surfaces to be removed to sound concrete and restored to a flat plane and/or restored to match formed surfaces.

f. Unit Price #5: See specification-01 02 50 1.4 Schedule of Unit Prices

Front Porch Floor: Cracks to be routed. Deteriorated concrete floor surfaces to be removed to sound concrete and restored to a flat plane. Deteriorated concrete surfaces of the beam along the leading edge of the porch deck and the underside of the formed deck to be removed to sound concrete and restored to match formed surfaces. Corroded reinforcing in the mean to be cleaned to a bare metal condition.

g. Unit Price #6: See specification-01 02 50 1.4 Schedule of Unit Prices

Concrete slab-on-grade below front porch: Repair and/or replace existing slabs for shrinkage cracks and unsealed joints between slab sections (to prevent water infiltration to the subgrade).

- h. Front porch side entry stairs: Deteriorated concrete surfaces to be removed to sound concrete and restored to a flat plane and/or restored to match formed surfaces.
- i. Rear wall exterior stairs: Deteriorated concrete surfaces to be removed to sound concrete and restored to a flat plane and/or restored to match formed surfaces.
- j. Rear wall door stoop: Horizontal and vertical surfaces to be restored to a uniform alignment.

02 – HVAC-0.2 BB#2

- 1. Work associated with Corridor #015, Counselor Office #3 #016, and Supervisor Office #017 in the Basement: (See drawings M200, M300)

03 – PLUMBING AND FIRE PROTECTION-.03 BB#2

2. PLUMBING-.03 BB#2

- a. Work associated with Corridor #015, Counselor Office #3 #016, and Supervisor Office #017 in the Basement: (See drawings P200, FP200)

3. FIRE PROTECTION-.03 BB#2

- a. Work associated with Corridor #015, Counselor Office #3 #016, and Supervisor Office #017 in the Basement: (See drawings P200, FP200)

04 – ELECTRICAL-BB#2

1. ELECTRICAL POWER AND LIGHTING .4 BB-2

- a. Work associated with Corridor #015, Counselor Office #3 #016, and Supervisor Office #017 in the Basement: (See drawings E200, E300)

2. NEW WI-FI SYSTEM: .04 BB-2

3. SECURITY: .04 BB-2

- a. Requirements for rooms #015, #016 and #017.

4. TELECOM: .04 BB-2

- a. Use CAT 6 wiring.
- b. Phone and Data Drops located in the following areas:
 - 1) #015 Corridor
 - 2) #016 Counselor Office
 - 3) #017 Supervisor's Office

BB-3:

01 – GENERAL AND SITE WORK-BB#3

1. ABATE: .01 BB-3

- a. Abate LBP on dormer trim and on building fascia that is to be removed/replaced.

2. DEMOLITION: .01 BB-3

- a. Demolish existing asphalt shingle roofing.
- b. Demolish existing gutters & downspouts.
- c. Demolish existing wood trim at dormers.

3. REPAIR: .01 BB-3

- a. Unit Price #1: Existing fascia that is damaged.

4. NEW CONSTRUCTION: .01 BB-3

- a. Asphalt shingle roofing system.
- b. New ridge vent.
- c. New insulation baffles at blown-in cellulose insulation.
- d. New aluminum gutters & downspouts.
- e. PVC shingle siding/trim at dormers.
- f. Wrap existing and replacement frieze, soffit, fascia, and rake with new aluminum to encapsulate remaining LBP.
- g. Replace front porch floor
- h. Replace front porch main entry and side entry stairs (repair is included under BB-2).
- i. Replace rear wall exterior stairs (repair is included under BB-2).

02 – HVAC-BB#3 NA

03 – PLUMBING AND FIRE PROTECTION-BB#3 NA

04 – ELECTRICAL-BB#3 NA

PROPRIETARY PRODUCTS:

1. **Conexus-Distech Controls** (automatic temperature control system)
 2. **Pelco** (security camera system)
 3. **Securitron** (electromagnetic door access control system)
 4. **Simplex** (fire alarm system)
 5. **Best Key Systems** (mechanical door hardware & keyways)
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END OF SCOPE OF WORK PRIORITIES