

District Name: Boone County District Code: 035 Facility Name: Ignite Institute School Code: N/A  
 Project Name: New Learning Academy REH Project #129-217 Date: 6/14/18

**PROJECT TYPE:** Yes No Gross Building Area (sf.)  
 New Building   \_\_\_\_\_  
 Addition   \_\_\_\_\_  
 Renovation   1st (132,500); 2nd (40,000)

Provisions for Future Expansion: Multiple areas will be kept as-is for future expansion

Proposed Alternates: (1) Roof replacement (4) Children's Inc. (7) Food Service mfrs  
 (2) Resilient tile by nora (5) Aphalt overlay and patch (8) 2nd floor HVAC units  
 (3) Health Services (6) HVAC units by Trane (9) Generator  
 (10) Intrusion detection

Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.

**BUILDING CONSTRUCTION CHARACTERISTICS:**

Description of Building Structure:

Foundation: Poured concrete  
 Exterior Walls: Curtainwall, masonry and metal panel  
 Roof Structure: Metal deck, rigid insulation and EPDM

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

N/A (industrial use) Energy Consumption "Existing" (kBtu/sf/yr)  
75 Energy Consumption Target (kBtu/sf/yr)

YES NO  
  LEED Certified Other: \_\_\_\_\_  
  Designed to meet Energy Star  
  Exceeds ASHRAE 90.1(2007) by 10% (Minimum)  
  Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design  
 Life Cycle Cost Analysis Software Used: \_\_\_\_\_

If not yes to one or more of the above, explain why. Base bid of the project includes 1/3 of the original HVAC equipment remaining as is for reuse. Target EUI is based on base-bid equipment condition. No energy model was required by the Owner.

Designed to be Net-Zero  
  Designed to be Net-Zero Ready

**Energy Efficient Design Features: (See List Page 4, or Use Drop Down List)**

East / West Building Orientation  YES  NO  
 Gross Exterior Wall Area (sf): 31,114 Avg. Exterior Wall R-Value: unknown  
 Gross Window / Door Area (sf): 16,842 Avg. Window/Door R-Value: unknown  
 Gross Roof Area (sf): 132,500 Avg. Roof R-Value: unknown  
 Exterior Wall Type: E - other, describe (wall panels, curtainwall, split faced block) Other: \_\_\_\_\_  
 Roofing Type: B - EPDM over rigid insulation Other: Mech attached EPDM  
 HVAC System Type: L - other Other: Packaged RTU/VAV  
 Classroom Lighting: E - other Other: LED  
 Active Daylighting: F - none Other: 0-10V dimming  
 Passive Daylighting: G - none Other: \_\_\_\_\_  
 On Site Energy Generation: F - other Other: none

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Air Purification Systems : YES  NO

Gray Water System : YES  NO

Low Water Use Fixtures : YES  NO

Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**PLUMBING:**

Type of Sewage Disposal: Public

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: xx HVAC: \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): Electric / natural gas

**ELECTRICAL:**

Source of Electric Power: Utility - Owen Electric

Voltage Serving Facility: 480/277 3 phase

Number of Convenience Outlets:  
Classrooms 4, miminum  
Library/Media Center N/A  
Business Ed N/A  
Family & Consumer Science N/A

Camera System: Yes

Lighting Intensity (fc.):  
Std. Classrooms 50  
Library/Media Ctr N/A  
Science Lab 75  
Science Clrm 50  
Band/Music N/A  
Business Ed N/A  
Shops 50-75  
Corridors 20, min.  
Stairways 20, min.  
Cafeteria 50  
Pre-School Clrm N/A  
Art Classroom 100  
Gymnasium N/A

**SPECIAL EQUIPMENT:**

| System               | Conduit Only | Conduit & Wiring | Complete with Equipment |
|----------------------|--------------|------------------|-------------------------|
| Bell                 | _____        | _____            | <u>xx</u>               |
| Clock                | _____        | _____            | <u>xx</u>               |
| Fire Alarm           | _____        | _____            | <u>xx</u>               |
| Intercom             | _____        | _____            | <u>xx</u>               |
| Telephone            | _____        | <u>xx</u>        | _____                   |
| Television           | _____        | _____            | _____                   |
| Computer             | _____        | <u>xx</u>        | _____                   |
| Wireless Network     | _____        | <u>xx</u>        | _____                   |
| Interactive White bd | _____        | <u>xx</u>        | _____                   |
| Voice Amplification  | _____        | _____            | <u>xx</u>               |

**FIXED EQUIPMENT:**

|                     |            |                        |            |
|---------------------|------------|------------------------|------------|
| Teacher Cabinet     | <u>yes</u> | Custodial Room Shelves | <u>no</u>  |
| Student Lockers     | <u>yes</u> | Science Laboratories   | <u>yes</u> |
| Folding Bleachers   | <u>no</u>  | Family & Consumer Sci  | <u>no</u>  |
| Library Furnishings | <u>no</u>  | Other                  | _____      |
| Dry Food Shelves    | <u>yes</u> | Other                  | _____      |

Project: Ignite Institute

REH Project #129-217

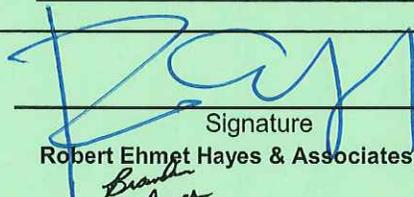
Date: 6/14/18

**INTERIOR FINISH SCHEDULE:**

| AREA               | FLOOR                       | WAINSCOT                    | WALLS                       | CEILING                     |
|--------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| General Office     | <u>Carpet</u>               | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Corridors          | <u>Rubber/Concrete</u>      | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Custodial          | <u>Concrete</u>             | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Kitchen            | <u>Tile</u>                 | <u>Tile</u>                 | <u>Paneling</u>             | <u>Acoustic</u>             |
| Cafeteria          | <u>Concrete</u>             | <u>~~</u>                   | <u>Drywall</u>              | <u>Exposed</u>              |
| Gym                | <u>~~</u>                   | <u>~~</u>                   | <u>~~</u>                   | <u>~~</u>                   |
| Showers/Locker     | <u>Tile</u>                 | <u>Tile</u>                 | <u>Drywall</u>              | <u>Acoustic</u>             |
| Toilets            | <u>Tile</u>                 | <u>Tile</u>                 | <u>Drywall</u>              | <u>Acoustic</u>             |
| Library/Media Cntr | <u>Carpet</u>               | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Classrooms         | <u>Rubber</u>               | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Music              | <u>Rubber</u>               | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic and Exposed</u> |
| Art                | <u>Concrete</u>             | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic</u>             |
| Science            | <u>Concrete</u>             | <u>~~</u>                   | <u>Drywall</u>              | <u>Acoustic and Exposed</u> |
| FMD                | <u>~~</u>                   | <u>~~</u>                   | <u>~~</u>                   | <u>~~</u>                   |
| OTHER AREAS        | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |
|                    | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |
|                    | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |

Miscellaneous Project Specific Features:

Kentucky Registered Architect:

  
\_\_\_\_\_  
Signature  
Robert Ehmet Hayes & Associates, PLLC

Date: 6-8-18

Kentucky Registered Engineer:

  
\_\_\_\_\_  
Signature  
Shroul Tate Wilson

Date: 06/08/18

Board Designee or Superintendent:

\_\_\_\_\_  
Signature  
Boone County Board of Education

Date: \_\_\_\_\_

**Energy Efficient Design Features Lists**

**Exterior Wall Type**

- A - face brick, captured air space, board insulation and waterproof CMU
- B - face brick, captured air space, sprayed insulation on CMU
- C - face brick, captured air space, sheathing over metal insulated stud system, interior finish system
- D - face brick, ICF poured concrete, interior finish system
- E - other, describe

**Roofing Type List**

- A - modified bitumen over rigid insulation
- B - EPDM over rigid insulation
- C - plastic single ply over rigid insulation
- D - metal roofing over nailable deck with insulation
- E - asphalt shingle roofing over nailable deck with insulation
- F - other, describe

**HVAC System Type List**

- A - two pipe unit ventilator system
- B - water source heat pump system with air make up
- C - ground source heat pump system with air make up
- D - hybrid water source heat pump system with boiler/chiller and well field with air make up
- E - variable refrigerant flow (VRF) with air make up
- F - hybrid geothermal/variable refrigerant flow (VRF) with air make up
- G - variable refrigerant volume (VRV) with air make up
- H - hybrid geothermal/variable refrigerant volume (VRV) with air make up
- I - chilled beam system
- J - hybrid chilled beam/geothermal system
- L - other

**Classroom Lighting List**

- A - T8 fluorescent fixtures
- B - T5 fluorescent fixtures
- C - high energy gas fixtures
- D - low voltage systems
- E - other

**Active Daylight System List**

- A - classroom fluorescent dimming including dimming switches, ballasts and sensors
- B - occupancy light control sensors
- C - remote sensor bi-level lighting with no fixtures dimming
- D - manual bi-level lighting with no fixture dimming
- E - other
- F - none

**Passive Daylight Systems List**

- A - upper classroom clerestory lighting with sloped ceiling plane
- B - lower classroom clerestory lighting that does NOT require sloping the ceiling plane
- C - exterior light shelves
- D - solar tubes without dimming
- E - solar tubes with internal dimmers
- F - other
- G - none

**On Site Energy Generation List**

- A - solar water heating
- B - solar electric generation (small units for demonstration or for limited areas)
- C - solar electric generation (to support the entire building's energy needs)
- D - wind generation (small units for demonstration or for limited areas)
- E - wind generation (to support the entire building's energy needs)
- F - other

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For Reference