

District Name: Henderson Co Schools District Code: 251 Facility Name: South Heights Elementary School Code: 091

Project Name: Henderson County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 57,523

Provisions for Future Expansion: _____

Proposed Alternates: (1) _____
(2) _____
(3) _____

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

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: _____

Exterior Walls: _____

Roof Structure: _____

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

83.0 Energy Consumption "Existing" (kBtu/sf/yr)

82.0 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: Trane Trace 700

If not yes to one or more of the above, explain why. _____

☐ ☒ 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): _____ Avg. Exterior Wall R-Value: _____

Gross Window / Door Area (sf): _____ Avg. Window/Door R-Value: _____

Gross Roof Area (sf): _____ Avg. Roof R-Value: _____

Exterior Wall Type: _____ Other: _____

Roofing Type: _____ Other: _____

HVAC System Type: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

Heating Only: _____ Heating & Mechanical: _____ HVAC: _____ A/C Only: _____
Ventilation Only

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

| | |
|---------------------------------|---------------------------|
| Source of Electric Power: _____ | Lighting Intensity (fc.): |
| Voltage Serving Facility: _____ | Std. Classrooms _____ |
| Number of Convenience Outlets: | Library/Media Ctr _____ |
| Classrooms _____ | Science Lab _____ |
| Library/Media Center _____ | Science Clrm _____ |
| Business Ed _____ | Band/Music _____ |
| Family & Consumer Science _____ | Business Ed _____ |
| Camera System: _____ | Shops _____ |
| | Corridors _____ |
| | Stairways _____ |
| | Cafeteria _____ |
| | Pre-School Clrm _____ |
| | Art Classroom _____ |
| | Gymnasium _____ |

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

| | |
|---------------------------|------------------------------|
| Teacher Cabinet _____ | Custodial Room Shelves _____ |
| Student Lockers _____ | Science Laboratories _____ |
| Folding Bleachers _____ | Family & Consumer Sci _____ |
| Library Furnishings _____ | Other _____ |
| Dry Food Shelves _____ | Other _____ |

INTERIOR FINISH SCHEDULE:

| AREA | FLOOR | WAINSCOT | WALLS | CEILING |
|--------------------|-------|----------|-------|---------|
| General Office | | | | |
| Corridors | | | | |
| Custodial | | | | |
| Kitchen | | | | |
| Cafeteria | | | | |
| Gym | | | | |
| Showers/Locker | | | | |
| Toilets | | | | |
| Library/Media Cntr | | | | |
| Classrooms | | | | |
| Music | | | | |
| Art | | | | |
| Science | | | | |
| FMD | | | | |
| OTHER AREAS | | | | |
| | | | | |
| | | | | |
| | | | | |

Miscellaneous Project Specific Features: _____

| | | |
|-----------------------------------|-----------|-------------|
| GESC Qualified Provider | _____ | Date: _____ |
| | Signature | |
| Kentucky Registered Engineer: | _____ | Date: _____ |
| | Signature | |
| Board Designee or Superintendent: | _____ | Date: _____ |
| | Signature | |

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 place
- 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
- G - none