

District Name: Henderson District Code: 251 Facility Name: Spottsville Elementary School Code: 110

Project Name: Henderson County Schools - New Spottsville Elementary School

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☒ ☐
Addition ☐ ☐
Renovation ☐ ☐

Provisions for Future Expansion: The two story wing can be expanded

Proposed Alternates: (1) Cupola
(2) Low speed high volume fan
(3)

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

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: Spread footing with poured in place foundation

Exterior Walls: CMU, 4" spray on insulation, air space, & brick veneer

Roof Structure: Single ply TPO & 30 yr. asphalt shingles on insulated roof panel, & metal bar joist

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

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

24.5 Energy Consumption Target (kBtu/sf/yr)

YES NO

☐ ☒ LEED Certified Other: Energy Star
☒ ☐ 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: Taco System Analysis Tool "Life Cycle Costs"

If not yes to one or more of the above, explain why. LEED's is not an indicator of energy efficiency

☐ ☒ 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: R-24

Gross Window / Door Area (sf): Avg. Window/Door R-Value: R-2.2, R-20 Nanogel

Gross Roof Area (sf): Avg. Roof R-Value: R-25

Exterior Wall Type: B - face brick, captured air space, sprayed insulation on CMU Other:

Roofing Type: E - asphalt shingle roofing over nailable deck with insulation Other:

HVAC System Type: C - ground source heat pump system with air make up Other:

Classroom Lighting: LED Other:

Active Daylighting: B - occupancy light control sensors Other: and LED dimming

Passive Daylighting: C - exterior light shelves Other:

On Site Energy Generation: G - none Other:

Air Purification Systems : YES ☐ NO ☒Gray Water System : YES ☐ NO ☒Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:Type of Sewage Disposal: Package plant on site**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: KenergyVoltage Serving Facility: 120/208 VAC 3Ø 4W

Number of Convenience Outlets:

Classrooms 12Library/Media Center 14Business Ed N/AFamily & Consumer Science N/ACamera System: Yes

Lighting Intensity (fc.):

Std. Classrooms 50 fc avg.Library/Media Ctr 50 fcScience Lab N/AScience Cirm N/ABand/Music N/ABusiness Ed N/AShops N/ACorridors 20Stairways 20Cafeteria 50Pre-School Cirm 50Art Classroom 50Gymnasium 50**SPECIAL EQUIPMENT:**

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

FIXED EQUIPMENT:

Teacher Cabinet	<u>x</u>	Custodial Room Shelves	<u>x</u>
Student Lockers	<u>x</u>	Science Laboratories	_____
Folding Bleachers	<u>x</u>	Family & Consumer Sci	_____
Library Furnishings	<u>x</u>	Other	_____
Dry Food Shelves	<u>x</u>	Other	_____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office	Carpet	n/a	Paint	2x2 SAPC
Corridors	Stained Concrete	n/a	Epoxy / Paint	2x2 SAPC
Custodial	Exposed Concrete	n/a	Epoxy	2x2 SAPC
Kitchen	Quarry Tile	n/a	Epoxy	2x2 SAPC
Cafeteria	VCT	n/a	Epoxy	2x2 SAPC
Gym	Wood	n/a	Epoxy	2x2 SAPC
Showers/Locker	Ceramic Tile	n/a	Epoxy / Ceramic	2x2 SAPC
Toilets	Ceramic Tile	n/a	Epoxy / Ceramic	2x2 SAPC
Library/Media Cntr	Carpet	n/a	Paint	2x2 SAPC
Classrooms	VCT	n/a	Paint	2x2 SAPC
Music/Art	VCT	n/a	Epoxy	2x2 SAPC
Art	n/a	n/a	n/a	n/a
Science	n/a	n/a	n/a	n/a
FMD	VCT	n/a	Epoxy / Paint	2x2 SAPC

OTHER AREAS

Miscellaneous Project Specific Features: _____

Kentucky Registered Architect:


Signature

Date: 3/16/16

Kentucky Registered Engineer:

Signature

Date: _____

Board Designee or Superintendent:

Signature

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 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

For Reference

District Name: Henderson County District Code: 251 Facility: Spottsville Elementary School Code: 110

Project Name: Spottsville Elementary

Project Phase: _____ Design Development: ☒ Construction Documents: ☐

1. Site Development	\$	1,152,000.00
2. General Construction	\$	7,697,280.00
3. Heating, Ventilation & Air Conditioning	\$	2,701,510.00
4. Plumbing (Include Sprinkler System)	\$	1,196,383.00
5. Electrical Work	\$	1,775,508.00
6. Sewage Disposal System	\$	0.00
7. Total Construction Cost (1-6)	\$	14,522,681.00
8. Site Acquisition Cost (Purchase Price)	\$	
9. Legal Services	\$	
10. Fiscal Agent Fee	\$	69,900.00
11. Bond Discount	\$	283,000.00
12. Architect/Engineer Fee	\$	822,642.00
13. Construction/Manager Fee (If Applicable)	\$	434,453.62
14. Equipment/Furnishings (Not Fixed)/Computers	\$	0.00
15. Property & Topographic Survey	\$	7,950.00
16. Geotechnical Survey & Report	\$	21,160.00
17. Special Inspections	\$	40,000.00
18. Asbestos Abatement	\$	0
19. Commissioning Fee	\$	0
20. Plan Review Fee	\$	13,300.00
21. Printing & Distribution of Bid Docs	\$	15,000.00
22. Contingencies - Minimum 5% of Line 7	\$	726,119.05
23. Other Cost: Bank Rating Fee	\$	19,500.00
24. Total Other Cost (8-23)	\$	2,453,024.67
25. TOTAL PROJECT COST (line 7 + line 24)	\$	16,975,705.67

a. Gross Square Foot Area*	77,186
b. Total Cost Per Square Foot	219.93
c. Total Cost Per Pupil	\$ 24,251.00
d. Gross Sq. Ft. Area of Alternates	0
* Base Bid Area Only	

Kentucky Registered Architect/Engineer: [Signature] Date: 3-14-16

Construction Manager: [Signature] Date: 3-14-2016

Board of Education Designee: _____ Date: _____