OUTLINE SPECIFICATIONS ENERGY-DESIGN CRITERIA

702 KAR 4:160

| District Name: | HARDIN C | OUNTY | District Code: | Facility 231 Name: | BLUEGRASSS MIDDLE SCHOOL | School Code: | | | | |
|---|----------------|--------------------|---|-----------------------------|-------------------------------------|--------------------------|--|--|--|--|
| Proje | ct Name: | BLUEGRAS | UEGRASS MIDDLE SCHOOL - ASPHALT PARKING LOT RE-SURFACING | | | | | | | |
| PROJEC | T TYPE: | Yes | No | Gross Bui | ilding Area (sf.) | | | | | |
| New Buil | ding | | Ø | | • , , | | | | | |
| Addition | - | | Ø | <u></u> | | | | | | |
| Renovati | ion | Ø | | | | | | | | |
| Provision | ns for Future | Expansion: | N/A | | | | | | | |
| Proposed | d Alternates: | | | | | | | | | |
| | | (2) | | | | | | | | |
| Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed. N/A | | | | | | | | | | |
| BUILDIN | IG CONSTR | UCTION CHA | ARACTERISTICS: | | | | | | | |
| Description of Building Structure: Foundation: | | | | | | | | | | |
| E | | | | | | | | | | |
| | | | | | | | | | | |
| Ro | of Structure: | | | | - | | | | | |
| | | | | | | | | | | |
| ENERGY | <u> </u> | <u>r design (k</u> | RS 157.450 and KI | <u>RS 157.455)</u> : | | | | | | |
| | N/A | _Energy Con | sumption "Existing" | ' (kBtu/sf/yr) | | | | | | |
| | N/A | Energy Con | Energy Consumption Target (kBtu/sf/yr) | | | | | | | |
| YES | NO | | | | | | | | | |
| | | LEED Certif | ied C | Other: | | | | | | |
| | | • | Designed to meet Energy Star | | | | | | | |
| | | | Exceeds ASHRAE 90.1(2007) by 10% (Minimum) | | | | | | | |
| | | | Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design | | | | | | | |
| | | | Cycle Cost Analys | | | | | | | |
| If not yes | s to one or I | more of the a | above, explain wh | y. <u>Parking lo</u> | t re-surfacing project only. No nev | v building construction. | | | | |
| | | Designed to | be Net-Zero | | | | | | | |
| | | _ | be Net-Zero Ready | v | | | | | | |
| 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 W | indow / Door | Area (sf): | | _ Avg. Window/Door R-Value: | | | | | | |
| Gross Ro | oof Area (sf): | | | | _ Avg. Roof R-Value: | | | | | |
| Exterior \ | Nall Type: | | | | | Other: | | | | |
| Roofing 1 | | | | | Other: | | | | | |
| HVAC S | ystem Type: | | | | Other: | | | | | |
| Classroo | m Lighting: | | | Other: | | | | | | |
| Active Da | aylighting: | | | | | Other: | | | | |
| | Daylighting: | | | | | Other: | | | | |
| On Site Energy Generation: Other: | | | | | | | | | | |

KENTUCKY DEPARTMENT OF EDUCATION

BG-2

702 KAR 4:160

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

| Air Purification System | s: YES 🗆 NO 🗆 | 1 | | | | | | | | |
|--|--|---|-------------------------|--|--|--|--|--|--|--|
| Gray Water System : | YES NO |] | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| PLUMBING: | | | | | | | | | | |
| Type of Sewage Dispo | sal: N/A | | | | | | | | | |
| HEATING, VENTILATION AND AIR CONDITIONING: | | | | | | | | | | |
| Heating Only:N/A | Heating & Mechanical: Ventilation Only | N/A HVAC: N/A | A/C Only: N/A | | | | | | | |
| Fuel Source/Backup (if | f applicable): | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| ELECTRICAL: | | | | | | | | | | |
| Source of Electric Pow | er: N/A | | | | | | | | | |
| Voltage Serving Facility | y: | Std. Classrooms Library/Media Ctr | | | | | | | | |
| Number of Convenience Classrooms Library/Media Center Business Ed Family & Consumer So Camera System: | | Rueinage Ed | | | | | | | | |
| SPECIAL EQUIPMEN | <u>I</u> : | | | | | | | | | |
| System Bell Clock Fire Alarm Intercom Telephone Television Computer Wireless Network Interactive White bd Voice Amplification FIXED EQUIPMENT: | Conduit Only | Conduit & Wiring | Complete with Equipment | | | | | | | |
| Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings Dry Food Shelves | | Custodial Room Shelves Science Laboratories Family & Consumer Sci Other 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: | | | | | | | | | |
| Kentucky Register | ed Architect: | | | Date: | | | | | |
| | | Signature | | | | | | | |
| Kentucky Register | ed Engineer: | Signature | | Date: | | | | | |
| Board Designee or | · Superintendent: | O.g. aturo | | Date: | | | | | |
| Doard Designee Of | oupeninenuelii. | Signature | <u> </u> | | | | | | |

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