KENTUCKY DEPARTMENT OF EDUCATION **BG-2**

702 KAR 4:160 **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

District Name: **Christian County** District Code: **115** Facility Name: **Alternative School** School Code: _____

Project Name: **Alternative School Secure Vestibule**

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

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: **Existing Concrete Slabs**

Exterior Walls: **Existing C.M.U. / Brick Veneer**

Roof Structure: **Steel Structure**

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

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

34.29 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. New vestibule, will have minimal measurable effect on overall energy consumption. Interior renovation, does not affect HVAC or building insulation.

☐	☐	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: _____
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: **N/A**

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: **Existing**

Voltage Serving Facility: _____

Number of Convenience Outlets:
Classrooms _____
Library/Media Center _____
Business Ed _____
Family & Consumer Science _____

Camera System: **Yes (modify existing)**

Lighting Intensity (fc.):
Std. Classrooms _____
Library/Media Ctr _____
Science Lab _____
Science Clrm _____
Band/Music _____
Business Ed _____
Shops _____
Corridors **Existing**
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 _____
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 Registered Architect: Bruce A Nelson Date: 04/23/2020
Signature

Kentucky Registered Engineer: N/A 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