KENTUCKY DEPARTMENT OF EDUCATION

702 KAR 4:160

BG-2 OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name: Gallatin C	ounty	District _Code:	Facility Name:	Gallatin County High School	School Code:	191020		
Project Name:	Gallatin County Schools Guaranteed Energy Savings Contract							
PROJECT TYPE:	Yes	No	Gross Bui	lding Area (sf.)				
New Building				all Advantation on the second of the second				
Addition			hold-services.					
Renovation			90	0,072				
Provisions for Future	Expansion:							
Proposed Alternates)						
Describe special con	nditions, phasi	ng of project an	d alternates, attach a s	supplemental sheet, if needed.				
BUILDING CONSTR	RUCTION CH	ARACTERISTIC	<u>S</u> :					
Description of Buildin	•			***************************************				
Exterior Walls			443 C = \$100 C 100 C					
Roof Structure								
ENERGY EFFICIEN	T DESIGN (K	RS 157.450 and	d KRS 157.455):					
57.7	Energy Consumption "Existing" (kBtu/sf/yr)							
45.0								
45.3 YES NO	_ Energy Con	sumption Targe	t (KBtu/st/yr)					
	LEED Certif	fied	Other:					
		meet Energy S		YES				
	Exceeds ASHRAE 90.1(2007) by 10% (Minimum) YES Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design							
		-	•	Trane Trace 700	YES			
If not yes to one or								
	Designed to	be Net-Zero						
	-	be Net-Zero Re	eady					
Energy Efficient De	sign Feature	s: (See List Pa	age 4, or Use Drop D	own List)				
East / West Building	Orientation	YES	NO					
Gross Exterior Wall	Area (sf):			Avg. Exterior Wall R-Value	:			
Gross Window / Doo	or Area (sf):			- Avg. Window/Door R-Value				
Gross Roof Area (sf)	:			Avg. Roof R-Value	:			
Exterior Wall Type:	A - face brick,	captured air space, I	poard insulation and waterpr	roof CMU	Other:			
Roofing Type:		Α.	Other:	•				
HVAC System Type:	C - ground sou				_	Geothermal		
Classroom Lighting:	E - other				Other:			
Active Daylighting:					Other:			
Passive Daylighting:					Other:	***************************************		
On Site Energy Gene					Other:			

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Air Purification System Gray Water System: Low Water Use Fixtur Other:	NO			
PLUMBING:				
Type of Sewage Dispo	osal:			
HEATING, VENTILAT	ION AND AIR CONDITIONING:			
Heating Only:	Heating & Mechanical: Ventilation Only	<u>X</u>	HVAC:	A/C Only:
Fuel Source/Backup (if applicable):		Market Control of the	
ELECTRICAL:				
Source of Electric Pov	ver:		Lighting Intensity (fc.):	
Voltage Serving Facili	ty:	***************************************	Std. Classrooms Library/Media Ctr	
Number of Convenient Classrooms Library/Media Center Business Ed Family & Consumer S Camera System:	cience		Science Lab Science Clrm Band/Music Business Ed Shops Corridors Stairways Cafeteria Pre-School Clrm Art Classroom Gymnasium	
System Bell Clock Fire Alarm Intercom Telephone Television Computer Wireless Network Interactive White bd Voice Amplification	Conduit Only	Conduit &	Wiring	Complete with Equipment
FIXED EQUIPMENT:				
Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings Dry Food Shelves		Sci		

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INTERIOR FINISH SCHEDULE:									
AREA	FLOOR	WAINSCOT	E WALLS	CEILING					
General Office Corridors Custodial Kitchen Cafeteria Gym Showers/Locker Toilets Library/Media Cntr Classrooms Music									
Art Science			Water the second						
FMD									
OTHER AREAS									
Miscellaneous Project Specific Features:									
GESC Qualified P	rovider	Signature Signature	te daray	Date: 6/16/22 Date: 6/16/22					
Kentucky Register	ed Engineer:	Signatu	ire						
Board Designee or	Superintendent:	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