# **OUTLINE SPECIFICATIONS ENERGY-DESIGN CRITERIA**

District Name: Spencer		District Code:	541	Facility Name:	Bus Garage	School Code:	N/A		
Project Name:	Spencer County Bus Garage								
PROJECT TYPE:	Yes	No		Gross Bui	Iding Area (sf.)				
New Building	<b>√</b>				,528				
Addition					,020				
	_								
Renovation	Evpansion:	☑ N/Δ							
	Provisions for Future Expansion: N/A								
Proposed Alternates: (1) None (2)									
	(3	ý							
Describe special con	ditions, phas	ing of project	and altern	ates, attach a	supplemental sheet, if needed.				
BUILDING CONSTR	UCTION CH	ARACTERIS	TICS:						
			<u></u> .						
Description of Buildin	_	aatinga and G	Slob on Cr	ado					
Foundation	: Concrete F	ooungs and s	siab-on Gra	aue					
Exterior Walls	Exterior Walls: Pre-Engineered Metal Building Structure (Steel)								
Roof Structure: Pre-Engineered Metal Building Structure (Steel)									
ENERGY EFFICIEN	T DESIGN (K	RS 157.450	and KRS 1	<u>157.455)</u> :					
Unknown	_Energy Cor	sumption "Ex	kisting" (kB	stu/sf/yr)					
43	43 Energy Consumption Target (kBtu/sf/yr)								
YES NO									
	LEED Certi	fied	Othe	r:					
	Designed to meet Energy Star								
	Exceeds ASHRAE 90.1(2007) by 10% (Minimum)								
	Whole Build	ding Life Cycl	e Cost Ana	alysis Demons	trating Cost Effective Design				
	Life Cycle Cost Analysis Software Used:								
If not yes to one or	more of the	above, expla	in why.						
		be Net-Zero							
	Designed to	be Net-Zero	Ready						
<b>Energy Efficient De</b>	sign Feature	s: (See List	Page 4, o	r Use Drop D	own List)				
East / West Building	Orientation	☐ YES	☑ N	0					
Gross Exterior Wall	Area (sf):	5,660			_ Avg. Exterior Wall R-Value:	20			
Gross Window / Door Area (sf): 465 Avg. Window/Door R-Value:						2.5			
Gross Roof Area (sf)	:	6,905			_ Avg. Roof R-Value:	20	<u> </u>		
Exterior Wall Type:	E - other					Other:	Metal Panels / Batt Insul.		
Roofing Type:	E - other					Other:	Metal Panels / Batt Insul.		
HVAC System Type:	L - other					Other:	Split System		
Classroom Lighting:	E - other					Other:	LED LIGHTING		
Active Daylighting:	B - occupancy	light control sen	sors			Other:			
Passive Daylighting:	G - none					Other:			
On Site Energy Generation: G - none Other:									

# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

Air Purification System	ms: YES	□ NO	V			
Gray Water System :	YES	□ NO	<b>√</b>			
Low Water Use Fixture Other:	res: YES	_	_			
PLUMBING:						
Type of Sewage Disp	osal: <u>Municipal</u>					
HEATING, VENTILAT	TION AND AIR CO	NDITIONIN	<u>G</u> :			
Heating Only:	Heating & N			HVAC: X	_ A/C Only:	
Fuel Source/Backup	(if applicable):				_	
ELECTRICAL:						
Source of Electric Po	wer: LOCAL UT	ILITY		Lighting Intensity (fc.) Std. Classrooms	: N/A	
Voltage Serving Facility: 208V/3-PHASE		ASE		Library/Media Ctr Science Lab	N/A N/A	
Number of Convenier	nce Outlets:			Science Clrm	N/A	
Classrooms	N/A			Band/Music	N/A	
Library/Media Center Business Ed	N/A N/A			Business Ed	N/A N/A	
Family & Consumer S				Shops Corridors	50	
Tarmy a Corroanior C	1471			Stairways	30	
Camera System:	NO			Cafeteria	30	
				Pre-School Clrm	N/A	
				Art Classroom Gymnasium	N/A N/A	
SPECIAL EQUIPMEN	NT:			Gymnasium	IN/A	
System	Conduit Only		Cond	duit 9 Mirina	Complete with Equipment	
System	•		Conc	duit & Wiring	Complete with Equipment	
Bell Clock	N/A N/A	_				
Fire Alarm	14/71	_			YES	
Intercom	N/A	_				
Telephone		_	YES			
Television Computer		_	YES YES			
Wireless Network		_	YES			
Interactive White bd	N/A	_	YES			
Voice Amplification	N/A	= =				
FIXED EQUIPMENT:	_					
Teacher Cabinet	N/A			Custodial Room Shelves	N/A	
Student Lockers	N/A		<u> </u>	Science Laboratories	N/A	
Folding Bleachers	N/A			Family & Consumer Sci Other	N/A	
Library Furnishings Dry Food Shelves	N/A N/A		_	Other	Bus Lifts Casework	
,						

INTERIOR FINISH SCHEDULE:						
AREA	FLOOR	WAINSCOT	WALLS	CEILING		
General Office	Sealed Concrete	None	Gyp. Bd. / CMU	Acoustical Clg. Tile		
Corridors	Sealed Concrete	None	Gyp. Bd. / CMU	Acoustical Clg. Tile		
Custodial	Sealed Concrete	None	Gyp. Bd. / CMU	Acoustical Clg. Tile		
Kitchen	N/A	None	N/A	N/A		
Cafeteria	N/A	None	N/A	N/A		
Gym	N/A	None	N/A	N/A		
Showers/Locker	N/A	None	N/A	N/A		
Toilets	Sealed Concrete	None	Gyp. Bd. / CMU	Acoustical Clg. Tile		
Library/Media Cnt	Library/Media Cntr N/A		N/A	Acoustical Clg. Tile		
Classrooms	N/A	None	N/A	Acoustical Clg. Tile		
Music	N/A	None	N/A	Acoustical Clg. Tile		
Art	N/A	None	N/A	Acoustical Clg. Tile		
Science	N/A	None	N/A	Acoustical Clg. Tile		
FMD	N/A	None	N/A	Acoustical Clg. Tile		
OTHER AREAS Garage	Sealed Concrete	None	Mt. Linear Panels	Steel Struct./Vinyl Faced Batt		
Miscellaneous Project Specific Features:						
Kentucky Register	Date:10/25/19					
Kentucky Register	Date: 10.25.19					
Board Designee o	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