



FLOYD COUNTY BOARD OF EDUCATION  
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William Newsome, Jr., Vice-Chair - District 3  
Linda C. Gearheart, Member - District 1  
Dr. Chandra Varia, Member- District 2  
Rhonda Meade, Member - District 4

**Date:** March 23, 2020

**Agenda Item (Action Item):** Consider/Approve BG2's for the Floyd County Schools Guaranteed Energy Savings Project (BG# 20-175).

**Applicable State or Regulations:** Capital Construction Process 702 KAR 4:160.

**Budget/Financial Issues:** Total Project cost is \$8,645,000.00. Funding will come from Local FSPK Bond Sale and Local Gen. Fund Bond Sale.

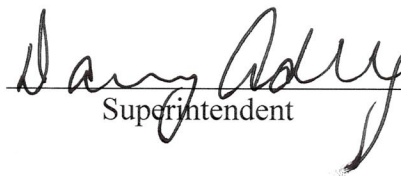
**Background and Rationale:**

Board approved the Initial BG1 for the project on January 27, 2020.

**Recommended Action:** To approve the BG2 for James D. Adams, Allen Elementary, Central Office and Central Maintenance, Betsy Layne Elementary, Betsy Layne High, Duff Allen Central Elementary, May Valley Elementary, Prestonsburg Elementary, Prestonsburg High, Renaissance Learning Center, South Floyd Elementary, and Stumbo Elementary Guaranteed Energy Savings Project.

**Contact Person(s):** Gregory Adams / 874-9569

  
Director

  
Superintendent

District Name: Floyd County Schools District Code: 175 Facility Name: James D. Adams Middle School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

**PROJECT TYPE:** Yes No Gross Building Area (sf.)  
New Building ☐ ☒ \_\_\_\_\_  
Addition ☐ ☒ \_\_\_\_\_  
Renovation ☒ ☐ 81518

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

29.5 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. \_\_\_\_\_

☐ ☒ 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: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A \_\_\_\_\_

**ELECTRICAL:**

Source of Electric Power:	<u>AEP</u>	Lighting Intensity (fc.):	
Voltage Serving Facility:	<u>480V/3Phase</u>	Std. Classrooms	<u>50</u>
Number of Convenience Outlets:		Library/Media Ctr	<u>75</u>
Classrooms	_____	Science Lab	<u>50</u>
Library/Media Center	_____	Science Clrm	<u>50</u>
Business Ed	_____	Band/Music	<u>50</u>
Family & Consumer Science	_____	Business Ed	<u>50</u>
Camera System:	_____	Shops	<u>50</u>
		Corridors	<u>20</u>
		Stairways	<u>20</u>
		Cafeteria	<u>50</u>
		Pre-School Clrm	<u>NA</u>
		Art Classroom	<u>100</u>
		Gymnasium	<u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Allen Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

**PROJECT TYPE:** Yes No Gross Building Area (sf.)  
New Building ☐ ☒ \_\_\_\_\_  
Addition ☐ ☒ \_\_\_\_\_  
Renovation ☒ ☐ 55904

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

39.7 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. \_\_\_\_\_

☐ ☒ 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: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none Other: \_\_\_\_\_

On Site Energy Generation: G - none Other: \_\_\_\_\_

## OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

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

Other: \_\_\_\_\_

**PLUMBING:**

Type of Sewage Disposal: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation OnlyFuel Source/Backup (if applicable): N/A**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet _____	Custodial Room Shelves _____
Student Lockers _____	Science Laboratories _____
Folding Bleachers _____	Family & Consumer Sci _____
Library Furnishings _____	Other _____
Dry Food Shelves _____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Central Office and Central Maintenance School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

**PROJECT TYPE:** Yes No Gross Building Area (sf.)  
New Building ☐ ☒ \_\_\_\_\_  
Addition ☐ ☒ \_\_\_\_\_  
Renovation ☒ ☐ 86087

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

39.1 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. \_\_\_\_\_

☐ ☒ 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: L - other Other: Packaged Units

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none Other: \_\_\_\_\_

On Site Energy Generation: G - none Other: \_\_\_\_\_

## OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

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

Other: \_\_\_\_\_

**PLUMBING:**

Type of Sewage Disposal: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation OnlyFuel Source/Backup (if applicable): N/A**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Betsy Layne Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>88737</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

52.9 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. \_\_\_\_\_

☐ ☒ 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: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none Other: \_\_\_\_\_

On Site Energy Generation: G - none Other: \_\_\_\_\_

## OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

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

Other: \_\_\_\_\_

**PLUMBING:**

Type of Sewage Disposal: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation OnlyFuel Source/Backup (if applicable): N/A**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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

---

For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Duff Allen Central Elementary School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

**PROJECT TYPE:** Yes No Gross Building Area (sf.)  
New Building ☐ ☒ \_\_\_\_\_  
Addition ☐ ☒ \_\_\_\_\_  
Renovation ☒ ☐ 83027

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

43.2 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. \_\_\_\_\_

☐ ☒ 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: B - water source heat pump system with air make up Other: \_\_\_\_\_  
Classroom Lighting: E - other Other: LED  
Active Daylighting: F - none Other: \_\_\_\_\_  
Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A

**ELECTRICAL:**

Source of Electric Power: Big Sandy RECC

Voltage Serving Facility: 480V/3Phase

Number of Convenience Outlets:

Classrooms

Library/Media Center

Business Ed

Family & Consumer Science

Camera System:

Lighting Intensity (fc.):

Std. Classrooms

Library/Media Ctr

Science Lab

Science Ctrm

Band/Music

Business Ed

Shops

Corridors

Stairways

Cafeteria

Pre-School Ctrm

Art Classroom

Gymnasium

50

75

50

50

50

50

50

20

20

50

NA

100

50

**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

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

**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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Betsy Layne High School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>92330</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

39.0 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. \_\_\_\_\_

☐ ☒ 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: L - other Other: VRF & Air Source Split Systems

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none Other: \_\_\_\_\_

On Site Energy Generation: G - none Other: \_\_\_\_\_

## OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

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

Other: \_\_\_\_\_

**PLUMBING:**

Type of Sewage Disposal: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation OnlyFuel Source/Backup (if applicable): N/A**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet _____	Custodial Room Shelves _____
Student Lockers _____	Science Laboratories _____
Folding Bleachers _____	Family & Consumer Sci _____
Library Furnishings _____	Other _____
Dry Food Shelves _____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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: Floyd County Schools District Code: 175 Facility Name: May Valley Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>48065</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

35.0 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. \_\_\_\_\_

☐ ☒ 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): 48065 Avg. Roof R-Value: \_\_\_\_\_

Exterior Wall Type: \_\_\_\_\_ Other: \_\_\_\_\_

Roofing Type: C - plastic single ply over rigid insulation Other: \_\_\_\_\_

HVAC System Type: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A

**ELECTRICAL:**

Source of Electric Power: AEP	Lighting Intensity (fc.):
Voltage Serving Facility: 480V/3Phase	Std. Classrooms 50
Number of Convenience Outlets:	Library/Media Ctr 75
Classrooms	Science Lab 50
Library/Media Center	Science Clrm 50
Business Ed	Band/Music 50
Family & Consumer Science	Business Ed 50
Camera System:	Shops 50
	Corridors 20
	Stairways 20
	Cafeteria 50
	Pre-School Clrm NA
	Art Classroom 100
	Gymnasium 50

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Prestonsburg Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>73000</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

28.5 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. \_\_\_\_\_

☐ ☒ 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: C - ground source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A \_\_\_\_\_

**ELECTRICAL:**

Source of Electric Power:	<u>Big Sandy RECC</u>	Lighting Intensity (fc.):	
		Std. Classrooms	<u>50</u>
Voltage Serving Facility:	<u>480V/3Phase</u>	Library/Media Ctr	<u>75</u>
		Science Lab	<u>50</u>
Number of Convenience Outlets:		Science Clrm	<u>50</u>
Classrooms	_____	Band/Music	<u>50</u>
Library/Media Center	_____	Business Ed	<u>50</u>
Business Ed	_____	Shops	<u>50</u>
Family & Consumer Science	_____	Corridors	<u>20</u>
		Stairways	<u>20</u>
Camera System:	_____	Cafeteria	<u>50</u>
		Pre-School Clrm	<u>NA</u>
		Art Classroom	<u>100</u>
		Gymnasium	<u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Prestonsburg High School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>121013</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

45.0 Energy Consumption Target (kBtu/sf/yr)

YES	NO	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	LEED Certified
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Designed to meet Energy Star
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exceeds ASHRAE 90.1(2007) by 10% (Minimum)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	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. \_\_\_\_\_

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Designed to be Net-Zero
<input type="checkbox"/>	<input checked="" type="checkbox"/>	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): 94110 Avg. Roof R-Value: 28

Exterior Wall Type: \_\_\_\_\_ Other: \_\_\_\_\_

Roofing Type: C - plastic single ply over rigid insulation Other: \_\_\_\_\_

HVAC System Type: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A \_\_\_\_\_

**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms _____ 50
Number of Convenience Outlets:	Library/Media Ctr _____ 75
Classrooms _____	Science Lab _____ 50
Library/Media Center _____	Science Clrm _____ 50
Business Ed _____	Band/Music _____ 50
Family & Consumer Science _____	Business Ed _____ 50
Camera System: _____	Shops _____ 50
	Corridors _____ 20
	Stairways _____ 20
	Cafeteria _____ 50
	Pre-School Clrm _____ NA
	Art Classroom _____ 100
	Gymnasium _____ 50

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Renaissance Learning Center School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>23800</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

81.6 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. \_\_\_\_\_

☐ ☒ 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: L - other Other: VAV

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation OnlyFuel Source/Backup (if applicable): N/A**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: South Floyd Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>102199</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

36.0 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. \_\_\_\_\_

☐ ☒ 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): 60936 Avg. Roof R-Value: \_\_\_\_\_

Exterior Wall Type: \_\_\_\_\_ Other: \_\_\_\_\_

Roofing Type: \_\_\_\_\_ Other: \_\_\_\_\_

HVAC System Type: B - water source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC: \_\_\_\_\_ x \_\_\_\_\_ A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): N/A \_\_\_\_\_

**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>480V/3Phase</u>	Std. Classrooms <u>50</u>
Number of Convenience Outlets:	Library/Media Ctr <u>75</u>
Classrooms _____	Science Lab <u>50</u>
Library/Media Center _____	Science Clrm <u>50</u>
Business Ed _____	Band/Music <u>50</u>
Family & Consumer Science _____	Business Ed <u>50</u>
Camera System: _____	Shops <u>50</u>
	Corridors <u>20</u>
	Stairways <u>20</u>
	Cafeteria <u>50</u>
	Pre-School Clrm <u>NA</u>
	Art Classroom <u>100</u>
	Gymnasium <u>50</u>

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

Teacher Cabinet _____	Custodial Room Shelves _____
Student Lockers _____	Science Laboratories _____
Folding Bleachers _____	Family & Consumer Sci _____
Library Furnishings _____	Other _____
Dry Food Shelves _____	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:	_____	Date: _____
	Signature	
Kentucky Registered Engineer:	_____	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 plane
- 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

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For Reference

District Name: Floyd County Schools District Code: 175 Facility Name: Stumbo Elementary School School Code: \_\_\_\_\_

Project Name: Floyd County Schools Guaranteed Energy Savings Contract

<b>PROJECT TYPE:</b>	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>58900</u>

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: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

**ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

26.5 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. \_\_\_\_\_

☐ ☒ 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: C - ground source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**

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Ventilation Only

Fuel Source/Backup (if applicable): N/A

**ELECTRICAL:**

Source of Electric Power: <u>AEP</u>	Lighting Intensity (fc.):
Voltage Serving Facility: <u>208V/3Phase</u>	Std. Classrooms _____ 50
Number of Convenience Outlets:	Library/Media Ctr _____ 75
Classrooms _____	Science Lab _____ 50
Library/Media Center _____	Science Clrm _____ 50
Business Ed _____	Band/Music _____ 50
Family & Consumer Science _____	Business Ed _____ 50
Camera System: _____	Shops _____ 50
	Corridors _____ 20
	Stairways _____ 20
	Cafeteria _____ 50
	Pre-School Clrm _____ NA
	Art Classroom _____ 100
	Gymnasium _____ 50

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

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Student Lockers _____	Science Laboratories _____
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Art				
Science				
FMD				
OTHER AREAS				

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