




Bullitt County Public Schools

1040 Highway 44 East
Shepherdsville, Kentucky 40165

502-869-8000
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www.bullittschools.org

MEMO

TO: Keith Davis

FROM: Mark Mitchell 

DATE: May 8, 2018


RE: Board Agenda Item – Approval of the BG-2s for the Guaranteed Energy Savings Contract –Harshaw Trane

Presented for the Board's approval and signatures are the BG-2s as presented by Ernie Tacogue with Harshaw Trane related to the Guaranteed Energy Savings Contract (GESG).

As per KDE, the BG-2s are required as they outline the specifications for energy design criteria for each location within the confines of the GESG. A licensed engineer in the Commonwealth of Kentucky must certify each site location along with the GESG qualified provider.

I recommend the Board's approval and signatures of the BG-2s as presented by Ernie Tacogue with Harshaw Trane related to the Guaranteed Energy Savings Contract.

Attachment: BG-2s for the Guaranteed Energy Savings Contract

OK to May


District Name: Bullitt County District Code: 071 Facility Name: Board of Education Office School Code: _____

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 24,363

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):

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

43.7 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System	Conduit Only	Conduit & Wiring	Complete with Equipment
--------	--------------	------------------	-------------------------

Bell	_____	_____	_____
------	-------	-------	-------

Clock	_____	_____	_____
-------	-------	-------	-------

Fire Alarm	_____	_____	_____
------------	-------	-------	-------

Intercom	_____	_____	_____
----------	-------	-------	-------

Telephone	_____	_____	_____
-----------	-------	-------	-------

Television	_____	_____	_____
------------	-------	-------	-------

Computer	_____	_____	_____
----------	-------	-------	-------

Wireless Network	_____	_____	_____
------------------	-------	-------	-------

Interactive White bd	_____	_____	_____
----------------------	-------	-------	-------

Voice Amplification	_____	_____	_____
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FIXED EQUIPMENT:

Teacher Cabinet _____

Student Lockers _____

Folding Bleachers _____

Library Furnishings _____

Dry Food Shelves _____

Custodial Room Shelves _____

Science Laboratories _____

Family & Consumer Sci _____

Other _____

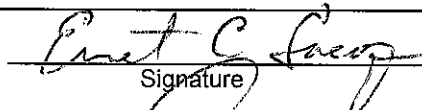
Other _____

INTERIOR FINISH SCHEDULE:

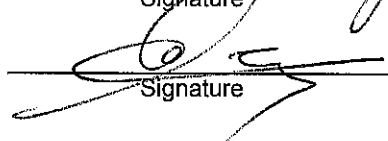
AREA	FLOOR	WAINSCOT	N WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

Miscellaneous Project Specific Features: _____

GESC Qualified Provider


SignatureDate: 5-7-18

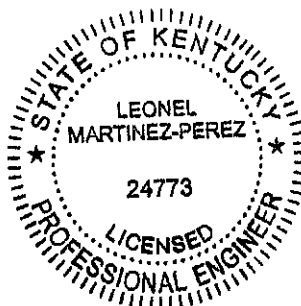
Kentucky Registered Engineer:


SignatureDate: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Bernheim Middle School School Code: 005

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE:	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>66,108</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):

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

28.6 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

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

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

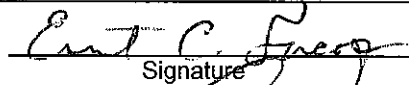
Teacher Cabinet _____	Custodial Room Shelves _____
Student Lockers _____	Science Laboratories _____
Folding Bleachers _____	Family & Consumer Sci _____
Library Furnishings _____	Other _____
Dry Food Shelves _____	Other _____

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: _____

GESC Qualified Provider


Signature

Date: 5-07-18

Kentucky Registered Engineer:

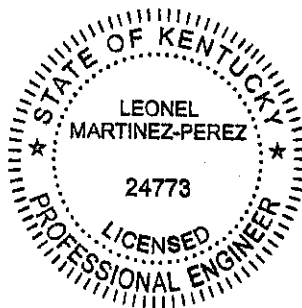

Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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
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- 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
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- 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
-

District Name: Bullitt County District Code: 071 Facility Name: Brooks Elementary School School Code: 010

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 82,433

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):

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

24.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

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

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet	_____	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	B 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: _____

GESc Qualified Provider

Ent C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

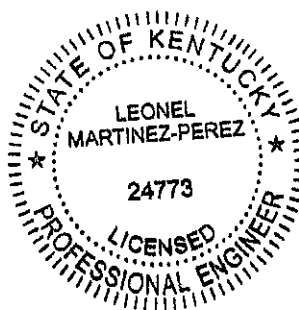
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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
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- 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
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- B - T5 fluorescent fixtures
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- D - low voltage systems
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- F - other
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On Site Energy Generation List

- A - solar water heating
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 - 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
-

District Name: Bullitt County District Code: 071 Facility Name: Bullitt Central High School School Code: 015

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 82,433

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):

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

37.3 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

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

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____	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	B 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: _____

GESC Qualified Provider

Ernest C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

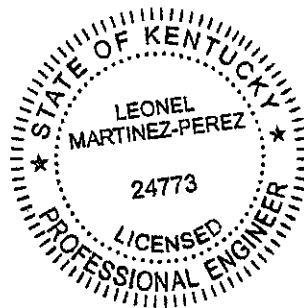
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

[Signature]
Signature

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
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- E - other, describe

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- A - modified bitumen over rigid insulation
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- 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

District Name: Bullitt County District Code: 071 Facility Name: Bullitt East High School School Code: 016

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 138,569

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):

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

40.7 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	B 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: _____

GESC Qualified Provider

Emt C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

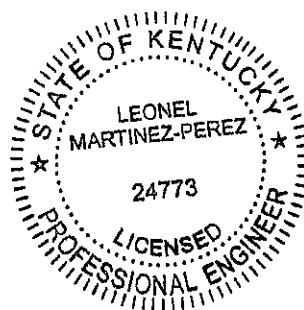
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Cedar Grove Elementary School School Code: 20

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 67,676

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):

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

36.1 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	B 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: _____

GESC Qualified Provider

Ent C. Green
Signature

Date: 5-7-18

Kentucky Registered Engineer:

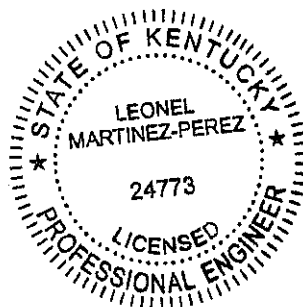
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Crossroads Elementary School School Code: 060

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 72,281

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):

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

24.0 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____ Lighting Intensity (fc.):

Voltage Serving Facility: _____ Std. Classrooms _____

Number of Convenience Outlets: Library/Media Ctr _____

Classrooms Science Lab _____

Library/Media Center Science Clrm _____

Business Ed Band/Music _____

Family & Consumer Science Business Ed _____

Camera System: _____ Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

Teacher Cabinet	_____	Custodial Room Shelves	_____
-----------------	-------	------------------------	-------

Student Lockers	_____	Science Laboratories	_____
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Folding Bleachers	_____	Family & Consumer Sci	_____
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Library Furnishings	_____	Other	_____
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Dry Food Shelves	_____	Other	_____
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INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	C 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: _____

GESc Qualified Provider

Ent C Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

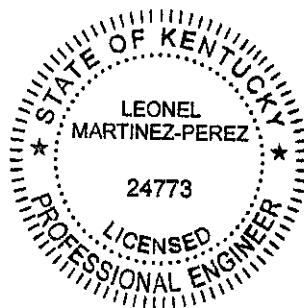
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Eastside Middle School School Code: 009

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 99,554

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):

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

25.5 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____ Lighting Intensity (fc.):

Voltage Serving Facility: _____ Std. Classrooms _____

Number of Convenience Outlets: _____ Library/Media Ctr _____

Classrooms _____ Science Lab _____

Library/Media Center _____ Science Clrm _____

Business Ed _____ Band/Music _____

Family & Consumer Science _____ Business Ed _____

Camera System: _____ Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System	Conduit Only	Conduit & Wiring	Complete with Equipment
--------	--------------	------------------	-------------------------

Bell	_____	_____	_____
------	-------	-------	-------

Clock	_____	_____	_____
-------	-------	-------	-------

Fire Alarm	_____	_____	_____
------------	-------	-------	-------

Intercom	_____	_____	_____
----------	-------	-------	-------

Telephone	_____	_____	_____
-----------	-------	-------	-------

Television	_____	_____	_____
------------	-------	-------	-------

Computer	_____	_____	_____
----------	-------	-------	-------

Wireless Network	_____	_____	_____
------------------	-------	-------	-------

Interactive White bd	_____	_____	_____
----------------------	-------	-------	-------

Voice Amplification	_____	_____	_____
---------------------	-------	-------	-------

FIXED EQUIPMENT:

Teacher Cabinet	_____	Custodial Room Shelves	_____
-----------------	-------	------------------------	-------

Student Lockers	_____	Science Laboratories	_____
-----------------	-------	----------------------	-------

Folding Bleachers	_____	Family & Consumer Sci	_____
-------------------	-------	-----------------------	-------

Library Furnishings	_____	Other	_____
---------------------	-------	-------	-------

Dry Food Shelves	_____	Other	_____
------------------	-------	-------	-------

AREA	FLOOR	WAINSCOT	E WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

GESC Qualified Provider

Signature E. C. Sloop

Date: 5-7-18

Kentucky Registered Engineer:

Signature

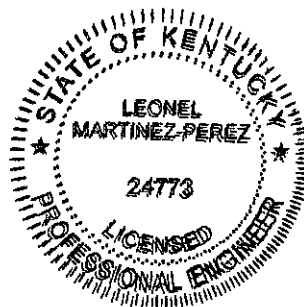
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature _____

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Freedom Elementary School School Code: 006

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 70,015

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):

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

28.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____	Lighting Intensity (fc.):
Voltage Serving Facility: _____	Std. Classrooms _____
Number of Convenience Outlets:	Library/Media Ctr _____
Classrooms _____	Science Lab _____
Library/Media Center _____	Science Ctrm _____
Business Ed _____	Band/Music _____
Family & Consumer Science _____	Business Ed _____
Camera System: _____	Shops _____
	Corridors _____
	Stairways _____
	Cafeteria _____
	Pre-School Ctrm _____
	Art Classroom _____
	Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____	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	F 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: _____

GESc Qualified Provider

Ernst C. Jacob
Signature

Date: 5-7-18

Kentucky Registered Engineer:

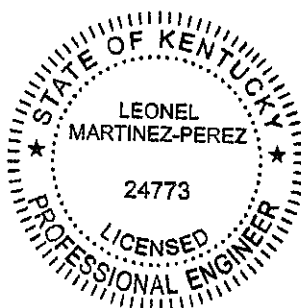
[Signature]
Signature

Date: 5/10/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Hebron Middle School School Code: 025

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 68,276

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):

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

34.3 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____ Lighting Intensity (fc.):

Voltage Serving Facility: _____ Std. Classrooms _____

Number of Convenience Outlets: _____ Library/Media Ctr _____

Classrooms _____ Science Lab _____

Library/Media Center _____ Science Clrm _____

Business Ed _____ Band/Music _____

Family & Consumer Science _____ Business Ed _____

Camera System: _____ Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

Teacher Cabinet	_____	Custodial Room Shelves	_____
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Student Lockers	_____	Science Laboratories	_____
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Folding Bleachers	_____	Family & Consumer Sci	_____
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Library Furnishings	_____	Other	_____
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Dry Food Shelves	_____	Other	_____
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INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	H 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: _____

GESC Qualified Provider

E. J. C. [Signature]
Signature

Date: 5-7-18

Kentucky Registered Engineer:

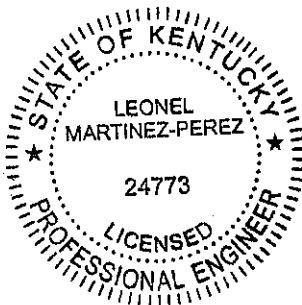
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Lebanon Junction Elementary School Code: 030

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 49,413

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):

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

39.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

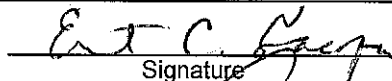
Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	L 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: _____

GESC Qualified Provider


Signature

Date: 5-7-18

Kentucky Registered Engineer:

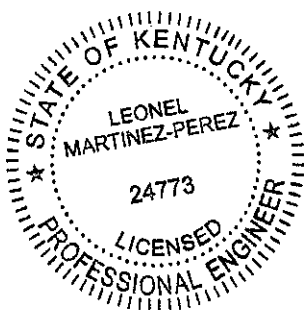

Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Mount Washington Middle School Code: 055

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 89,403

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):

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

30.0 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____ Lighting Intensity (fc.):

Voltage Serving Facility: _____ Std. Classrooms _____

Number of Convenience Outlets: _____ Library/Media Ctr _____

Classrooms _____ Science Lab _____

Library/Media Center _____ Science Clrm _____

Business Ed _____ Band/Music _____

Family & Consumer Science _____ Business Ed _____

Camera System: _____ Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System	Conduit Only	Conduit & Wiring	Complete with Equipment
--------	--------------	------------------	-------------------------

Bell	_____	_____	_____
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Clock	_____	_____	_____
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Fire Alarm	_____	_____	_____
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Intercom	_____	_____	_____
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Telephone	_____	_____	_____
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Television	_____	_____	_____
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Computer	_____	_____	_____
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Wireless Network	_____	_____	_____
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Interactive White bd	_____	_____	_____
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Voice Amplification	_____	_____	_____
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FIXED EQUIPMENT:

Teacher Cabinet	_____	Custodial Room Shelves	_____
-----------------	-------	------------------------	-------

Student Lockers	_____	Science Laboratories	_____
-----------------	-------	----------------------	-------

Folding Bleachers	_____	Family & Consumer Sci	_____
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Library Furnishings	_____	Other	_____
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Dry Food Shelves	_____	Other	_____
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INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	IV 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: _____

GESC Qualified Provider

Emilio C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

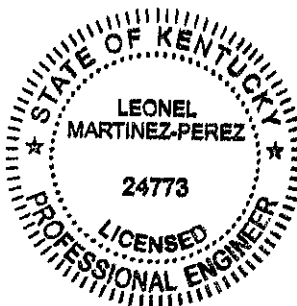
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Nichols Elementary School School Code: 070

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐ _____
Addition ☐ ☐ _____
Renovation ☒ ☐ 30,200

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):

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

39.5 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System

Conduit Only

Conduit & Wiring

Complete with Equipment

Bell _____

Clock _____

Fire Alarm _____

Intercom _____

Telephone _____

Television _____

Computer _____

Wireless Network _____

Interactive White bd _____

Voice Amplification _____

FIXED EQUIPMENT:

Teacher Cabinet _____

Student Lockers _____

Folding Bleachers _____

Library Furnishings _____

Dry Food Shelves _____

Custodial Room Shelves _____

Science Laboratories _____

Family & Consumer Sci _____

Other _____

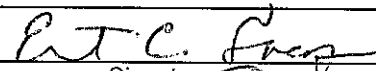
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	N WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

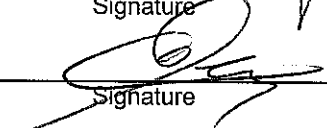
Miscellaneous Project Specific Features: _____

GESC Qualified Provider


Signature

Date: 5-7-18

Kentucky Registered Engineer:

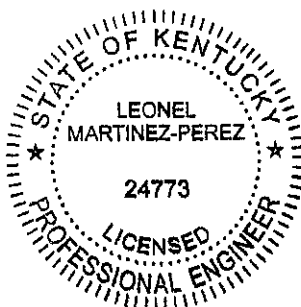

Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: North Bullitt High School School Code: 075

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐
Addition ☐ ☐
Renovation ☒ ☐ 148,821

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):

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

38.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm

Band/Music

Business Ed

Shops

Corridors

Stairways

Cafeteria

Pre-School Clrm

Art Classroom

Gymnasium

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet	_____	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	N 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: _____

GESC Qualified Provider

E. J. C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

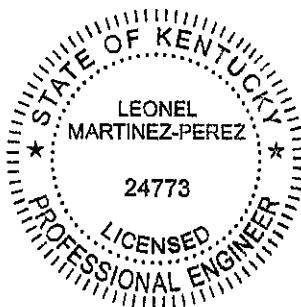
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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

District Name: Bullitt County District Code: 071 Facility Name: Old Mill Elementary School Code: 078

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐
Addition ☐ ☐
Renovation ☒ ☐ 57,896

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):

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

35.3 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: Trane Trace 700

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: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

Heating Only: _____ Heating & Mechanical: _____ HVAC: X A/C Only: _____
Ventilation Only

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm

Band/Music

Business Ed

Shops

Corridors

Stairways

Cafeteria

Pre-School Clrm

Art Classroom

Gymnasium

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:


Teacher Cabinet	_____	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				

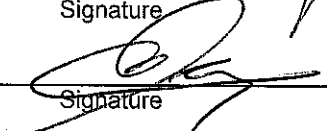
Miscellaneous Project Specific Features: _____

GESC Qualified Provider


Signature

Date: 5-7-18

Kentucky Registered Engineer:

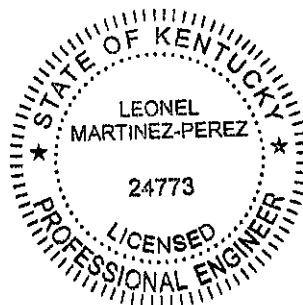

Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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
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- C - exterior light shelves
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- 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

District Name: Bullitt County District Code: 071 Facility Name: Overdale Elementary School School Code: 080

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 70,480

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):

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

27.7 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

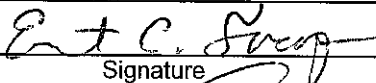
Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	Other	_____

INTERIOR FINISH SCHEDULE:

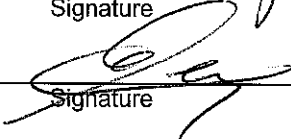
AREA	FLOOR	WAINSCOT	N WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

Miscellaneous Project Specific Features: _____

GESC Qualified Provider


SignatureDate: 5-7-18

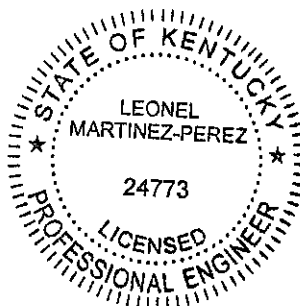
Kentucky Registered Engineer:


SignatureDate: 5/7/2018

Board Designee or Superintendent:

Signature

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 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

District Name: Bullitt County District Code: 071 Facility Name: Pleasant Grove Elementary School Code: 080

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 75,848

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):

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

35.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

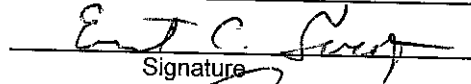
Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	N WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

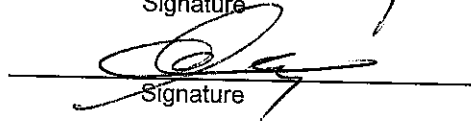
Miscellaneous Project Specific Features: _____

GESC Qualified Provider


Signature

Date: 5-7-18

Kentucky Registered Engineer:

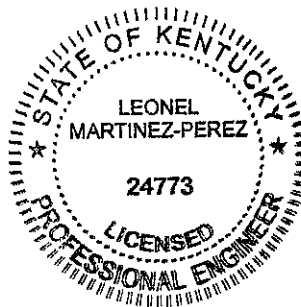

Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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

District Name: Bullitt County District Code: 071 Facility Name: Riverview Opportunity Center School Code: 065

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☐
Addition ☐ ☐
Renovation ☒ ☐ 31,000

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):

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

46.6 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System

Conduit Only

Conduit & Wiring

Complete with Equipment

Bell _____

Clock _____

Fire Alarm _____

Intercom _____

Telephone _____

Television _____

Computer _____

Wireless Network _____

Interactive White bd _____

Voice Amplification _____

FIXED EQUIPMENT:

Teacher Cabinet _____

Student Lockers _____

Folding Bleachers _____

Library Furnishings _____

Dry Food Shelves _____

Custodial Room Shelves _____

Science Laboratories _____

Family & Consumer Sci _____

Other _____

Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	N 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: _____

GESC Qualified Provider

Eut C. Lopez
Signature

Date: 5-7-18

Kentucky Registered Engineer:

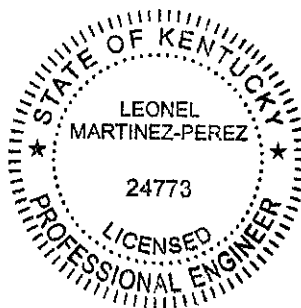
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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

District Name: Bullitt County District Code: 071 Facility Name: Roby Elementary School School Code: 090

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 70,480

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):

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

29.2 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

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

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____	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	N 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:

GESC Qualified Provider

Ent C Shop
Signature

Date: 5-7-18

Kentucky Registered Engineer:

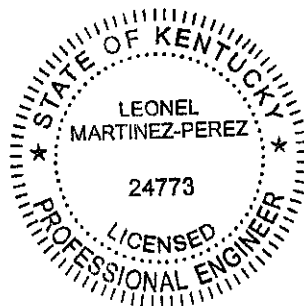
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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
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- 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

District Name: Bullitt County District Code: 071 Facility Name: Shepherdsville Elementary School Code: 090

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE:	Yes	No	Gross Building Area (sf.)
New Building	<input type="checkbox"/>	<input type="checkbox"/>	_____
Addition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>70,015</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):

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

30.3 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet	_____	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	N 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: _____

GESC Qualified Provider

E. J. C. Sharp
Signature

Date: 5-17-18

Kentucky Registered Engineer:

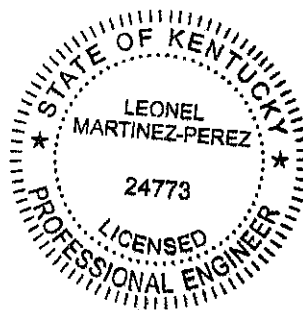
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

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 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
-

District Name: Bullitt County District Code: 071 Facility Name: Transportation Complex School Code: _____

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 15,081

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):

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

47.3 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____

Voltage Serving Facility: _____

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 Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	N 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: _____

GESC Qualified Provider

E. J. C. Secoy
Signature

Date: 5-7-18

Kentucky Registered Engineer:

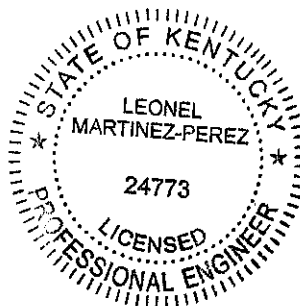
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

Date: _____



Energy Efficient Design Features Lists

Exterior Wall Type

- A - face brick, captured air space, board insulation and waterproof CMU
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- A - modified bitumen over rigid insulation
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- E - asphalt shingle roofing over nailable deck with insulation
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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
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- 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

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- A - T8 fluorescent fixtures
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- C - high energy gas fixtures
- D - low voltage systems
- E - other

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- A - classroom fluorescent dimming including dimming switches, ballasts and sensors
- B - occupancy light control sensors
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- D - manual bi-level lighting with no fixture dimming
- E - other
- F - none

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- G - none

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 - B - solar electric generation (small units for demonstration or for limited areas)
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 - 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
-

District Name: Bullitt County District Code: 071 Facility Name: Zoneton Middle School School Code: 007

Project Name: Bullitt County Schools Guarantee Energy Savings Contract

PROJECT TYPE: Yes No Gross Building Area (sf.)

New Building ☐ ☐ _____

Addition ☐ ☐ _____

Renovation ☒ ☐ 99,554

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):

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

22.4 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: _____ Other: _____

Classroom Lighting: _____ Other: LED

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☒ NO ☐

Other: _____

PLUMBING:

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): _____

ELECTRICAL:

Source of Electric Power: _____ Lighting Intensity (fc.): _____

Voltage Serving Facility: _____ Std. Classrooms _____

Number of Convenience Outlets: _____ Library/Media Ctr _____

Classrooms _____ Science Lab _____

Library/Media Center _____ Science Ctrm _____

Business Ed _____ Band/Music _____

Family & Consumer Science _____ Business Ed _____

Camera System: _____ Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Ctrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT:

System	Conduit Only	Conduit & Wiring	Complete with Equipment
--------	--------------	------------------	-------------------------

Bell	_____	_____	_____
------	-------	-------	-------

Clock	_____	_____	_____
-------	-------	-------	-------

Fire Alarm	_____	_____	_____
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Intercom	_____	_____	_____
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Telephone	_____	_____	_____
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Television	_____	_____	_____
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Computer	_____	_____	_____
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Wireless Network	_____	_____	_____
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Interactive White bd	_____	_____	_____
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Voice Amplification	_____	_____	_____
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FIXED EQUIPMENT:

Teacher Cabinet	_____	Custodial Room Shelves	_____
-----------------	-------	------------------------	-------

Student Lockers	_____	Science Laboratories	_____
-----------------	-------	----------------------	-------

Folding Bleachers	_____	Family & Consumer Sci	_____
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Library Furnishings	_____	Other	_____
---------------------	-------	-------	-------

Dry Food Shelves	_____	Other	_____
------------------	-------	-------	-------

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	N 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: _____

GESC Qualified Provider

Ent C. Sings
Signature

Date: 5-7-18

Kentucky Registered Engineer:

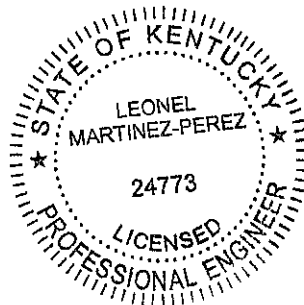
[Signature]
Signature

Date: 5/7/2018

Board Designee or Superintendent:

Signature

Date: _____



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